MOTHERS & children

One
decade
later

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FOREWORD

Mothers and Children: A Decade of Mothering is an inspiring milestone for the Department of Community Services. With the publication of this study another step has been taken toward unravelling and understanding more fully the complexities of families; in particular, those that began as single-parent, mother-led families. Dispelling the myths that surround these mothers and their children and, conversely, seeking a greater understanding of their circumstances will lead to better, more appropriate and, we hope, more humane, solutions to the problems these families frequently face.

This study is a continuation of a research project that began in 1978. That first study compared the circumstances of a group of unmarried mothers with their married counterparts over a period of 18 months after the birth of their first child. The study was undertaken because of increasing concern among staff of this Department and child welfare professionals about the growing number of unmarried mothers, particularly young unmarried mothers, who were opting to keep their children rather than place them for adoption. Little was known about the long-term implications of this decision for either the mother or her child. Without such information it was difficult to develop programs that would meet their needs.

The first study found that although the circumstances of unmarried mothers were often more difficult than those of married mothers, most unmarried mothers were managing well as parents and their children were healthy and well looked after. However, questions about longer-term effects remained. To better understand this, the Department of Community Services once again approached Health and Welfare Canada for funding to examine the situation of the mothers and children after 10 years had passed. This second phase of the study goes a long way to increasing our understanding of all mothers and their children and provides a framework in which public policy and programs to assist mothers and children can be more effectively developed.

Marie P. Dechman
Minister of Community Services

ACKNOWLEDGEMENTS

No study of this magnitude can be undertaken and successfully completed without the support and willing cooperation of many individuals and many organizations. We wish to acknowledge all those who so thoughtfully contributed to *Mothers and Children: A Decade of Mothering*.

First and foremost we thank with gratitude the mothers who participated so willingly in the research; indeed, most mothers eagerly participated in both this study and its predecesor. Sharing their experiences shows both their courage to change perceptions and their commitment to improving conditions for all mothers and children.

Most members of the Advisory Committee carried on from the first phase of the research — *Vulnerable Mothers, Vulnerable Children*. Their dedication and assistance is sincerely appreciated, as is that of their colleagues who joined them for phase two — *Mothers and Children*.

Funding for the study was provided by the Welfare Grants Directorate of National Health and Welfare. This is the second time such funds have been provided to the Department of Community Services and we acknowledge with thanks the support and commitment of the Department and its staff, in particular Mr. Evariste Thériault, Consultant, Welfare Research, to continuing the research. Also, we wish to thank the staff of the Regional Office for Income Security Programs who sent letters on our behalf to those mothers whom we were unable to locate.

The 16 District School Boards and their staffs co-operated fully in *Mothers and Children*. They warmly welcomed members of the research team to their schools and extended every courtesy and help in facilitating their work. To the District School Boards, their staffs and senior staff of the Department of Education, who assisted with the initial contacts, our sincere thanks.

We are also indebted to The Izaak Walton Killam Hospital For Children and its staff, especially Dr. John Anderson, for assisting the Research Team in the health-related portion of the study.

The Department of Health and Fitness assisted the Research Team in obtaining an expanded sample of young married mothers. We would like to extend our appreciation to the staff of Vital Statistics for their help with this and to Joan Phillips of the Department for providing statistical data and other information to the Research Team. We are indebted to the Department and its staff.

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There was a period during the study when the Research Team required assistance in relation to the testing of children in the schools. At extremely short notice the Department of Community Services' own psychometricians came to the rescue and undertook the necessary work. To Alan Cuvelier, Co-ordinator of Vocational and Developmental Assessment Services, and his staff, we offer a very heartfelt thank you.

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To the Research Team from the Institute for the Study of Women at Mount Saint Vincent University and all who participated in the study, we commend you for a job well done. We hope your efforts will be reflected in an increased understanding of the circumstances of unmarried mothers and their children, of unmarried parenthood in general and in progressive changes to programs and services that will meet the challenges the study participants present.

Last but by no means least, we acknowledge the unwavering support throughout this study of Mr. Carmen Moir, Deputy Minister of Community Service and the infinite patience in writing, rewriting and editing of our editor, donalee Moulton-Barrett.

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1 INTRODUCTION

In 1981 the Nova Scotia Department of Social Services (now the Department of Community Services) published *Vulnerable Mothers, Vulnerable Children (VMVC)*, an extensive report on the circumstances of Nova Scotia mothers who gave birth to their first child during the last six months of 1978 and the first two months of 1979. The research detailed in *VMVC* was conducted to obtain a better understanding of what appeared to be a significant change in family patterns; namely, the decision of young unmarried mothers to raise their children themselves rather than place them for adoption.

This change, which became apparent in the late 1960s and continued into the 1970s, was not anticipated by the Department of Social Services. Consequently, social programs to assist these mothers were not in place. By the mid-70s, special programs were deemed necessary; the Department's case workers, child welfare employees, and physicians treating young children all reported that the children of young unmarried mothers were frequently on their caseloads and often appeared to be living in highly unsatisfactory circumstances.

While no one doubted the validity of these reports, it was nevertheless difficult to place such reports in context. Case workers and physicians reported on the families and children who sought help from them but they did not know if the mothers they saw were drawn disproportionately from one group. Thus it was impossible to conclude whether young unmarried mothers were experiencing more difficulties than, for example, married mothers. Did unmarried mothers lack childcare information to a greater extent than married mothers? Were the financial circumstances of married and unmarried mothers noticeably different? Were the children of each group progressing equally well?

The lack of information on new mothers in general, and unmarried mothers in particular, made it impossible to understand the situation of the young unmarried mothers and their children. Without a comprehensive understanding of the experiences of these families, it was infeasible to decide what special programs, if any, needed to be developed: no one had a grasp on the problems young unmarried mothers faced or the magnitude of their problems.

Beyond broad, statistical and anecdotal data, there was virtually no information about the circumstances of unmarried mothers in Canada in the 1970s. However, the few existing studies did suggest why health and social services professionals were encountering more unmarried mothers, and particularly young unmarried mothers. In the 1950s approximately four percent of all births in Canada were to unmarried mothers; by 1981 this figure had increased to 13 percent. The 1970s saw a rapid increase in the number of unmarried women giving birth (see Appendix A, Table A1). The largest number of such births were to women 19 years of age and younger. In addition, by the late 1970s, it was estimated that 90 to 95 percent of all unmarried mothers were keeping their children rather than placing them for adoption.[1] Figures such as these suggest that unmarried mothers would be a far more noticeable category of people using health and social services than in the past.

The statistics show further interesting points. From the early 1980s the number of births to the youngest unmarried mothers appears to have stabilized; indeed they actually declined slightly. Unmarried mothers between the ages of 20 and 24 have had the highest number of births since 1981 with very noticeable increases occurring within all age groups between 20 and 39. In 1977, 50.5 percent of the unmarried mothers giving birth in that year were 20 years or older suggesting that concern about teenage unmarried mothers was well justified as this age group accounted for nearly 50 percent of all births to unmarried mothers. From 1981 on, however, the majority of unmarried mothers are not teenagers. In 1986, teenagers accounted for only 25.6 percent of all births to unmarried women. Teenagers who gave birth, however, were typically unmarried, this being the case for 75.2 percent of them in 1986.

A further point relates to the total number of pregnancies of never married women. Taking the figures for births together with those for abortion, it is evident that many young unmarried women do become pregnant and that close to half of all pregnancies are terminated by abortion. Such a figure suggests that many young women did not plan to become pregnant and did not wish to have a child as a young unmarried mother.

Studies on unmarried mothers were available from other countries, particularly the U.S.A., but it could not be assumed that these findings were directly applicable to Canada and Nova Scotia given the uniqueness of our health care, educational and social services. An in depth study of the circumstances of young unmarried mothers in Nova Scotia was required if their particular needs were to be addressed effectively.

It was also evident from reading the few available reports from other countries that much of the research focused on specialized groups and was, therefore, not appropriate for the present study. In particular, these studies focused only on unmarried mothers, making it impossible to understand how similar the experiences of unmarried mothers were from those of married mothers. In addition, conclusions were often based on very small samples.[2]

The Department of Social Services was concerned with overcoming these shortcomings in their research. Therefore of the 672 mothers in their study who gave birth to their first child between June, 1978 and February, 1979, 326 were married, and 346 were unmarried. The mothers were drawn from all regions of the province, not only from large urban centres.

In addition, the study was longitudinal in order to obtain a comprehensive understanding of the mothers' circumstances and how these affected the well-being of the children. Since this could not be gained from one interview at one point in time it was necessary to follow the development of the families over time. The initial phase of the project, resulting in the *VMVC* report, involved three interviews with the mothers—when the child was 3-7 weeks old, nine months old, and 18 months old. The second phase of the study, the one reported here, involved interviews with the mothers when their children were approximately 10 years old. It is anticipated that the third phase will call for further interviews with the mothers and the children in about five years when the young people are beginning to plan their own futures.

Phase One

Because of the concerns raised by social and health-care workers, the study's major objectives were to understand the difficulties experienced by unmarried mothers and their children and to determine the types of social services and programs necessary to assist them.

To achieve these objectives there was a focus on five major areas:

1. the mothers' birth control knowledge and use;
2. the decision-making process that led unmarried mothers to keep their children;
3. the changing circumstances of the unmarried mothers over time;
4. the health and development of the children; and
5. the quality of childcare.[3]

At the end of the first phase of the study the researchers were cautiously optimistic. While many of the unmarried mothers faced considerable hardship, overall their children were doing well and were well cared for. It was apparent, however, that the circumstances of the unmarried mothers were often different from those of their married counterparts.

Data from the first phase of the study showed that generally the unmarried mothers' knowledge of contraception was unsophisticated. The majority of these mothers, 68 percent, had not planned nor wanted to become pregnant. The younger the mother the less likely the pregnancy was wanted or planned. While nearly 50 percent of the unmarried mothers had used contraceptives at some point, their use was not consistent and many of them were not aware of the different contraceptive methods. Two out of five of the unmarried mothers who did not want to get pregnant indicated that they lacked information about contraception. In addition, those women who knew about contraception often found access difficult. The researchers concluded that with more information and easier access over half the unwanted pregnancies might have been prevented.

With respect to the decision to keep the child, the unmarried mothers reported that in most cases this was their decision. The younger mothers, particularly those 16 and under, were more likely to have spoken with professionals but the final decision was clearly the mother's. Over 80 percent of the mothers consulted family and friends about keeping their child and, on the whole, the people consulted agreed with the mothers and supported the idea of keeping the baby. In making this decision, however, little thought seemed to be given to the possible negative consequences for the mother's future or that of the child. The mothers reported that none of their considerations led them to believe they should give up the child for adoption. The decisions the mothers made during pregnancy and soon after birth did not change during the course of the study. At the time of the 18-month interview, only 10 out of 346 unmarried mothers had placed their children for adoption.

The unmarried mothers' circumstances were often more difficult than those of their married counterparts. This was the case on a number of important variables including housing, education, employment and income. Unmarried mothers were most likely to be living with members of their family during the 18 months of the study, had less stability in their living arrangements and were more likely to be living in overcrowded conditions that lacked basic household amenities. The interviewers estimated that about 37 percent of the unmarried mothers and 9.6 percent of the married mothers had housing problems.

From the beginning of the study it was evident that the unmarried mothers had lower levels of educational attainment. For instance, only 19.6 percent of the unmarried mothers had completed high school or gone to university, compared to 65.6 percent of the married mothers. This low level of educational attainment was not simply a factor of age, for regardless of whether the unmarried mothers were in or out of school at the time they gave birth, they had lower educational levels than the married mothers.

Since education is so closely tied to employment, it was equally apparent that many mothers needed to upgrade their education if they were to be solely responsible for their financial security. In fact, only 28.4 percent of the unmarried mothers went back to school or undertook job training after the birth of their child. Seventy-three percent of those who returned to school were successful in upgrading their qualifications. On the whole, the younger the mother and the lower her educational level, the less likely she would be successful in upgrading her education. Compared to the married mothers, therefore, the unmarried mothers were not only originally disadvantaged with respect to educational attainment, they continued to be so.

Over the 18-month period of the study's first phase, 61.2 percent of the unmarried mothers had some employment compared to 69.8 percent of the married mothers. Only 4.7 percent of the former group, compared to 21.4 percent of the latter, had worked continuously. In general, the younger the unmarried mother at the time her child was born, the less likely she was to have been employed. In addition, unmarried mothers with lower levels of education were least likely to have worked. Unmarried mothers were usually employed in unskilled or semi-skilled jobs — 52.8 percent of the unmarried mothers compared to 23.2 percent of the married mothers. Conversely, 25.2 percent of the married mothers and 3.3 percent of the unmarried mothers held professional, managerial or administrative jobs. Compared to married mothers, the unmarried mothers changed jobs more frequently and had somewhat lower levels of job satisfaction.

The financial circumstances of the unmarried mothers were also often difficult and unsatisfactory. During the first phase of the study, approximately 50 percent of the unmarried mothers had received public financial assistance. Those unmarried mothers who lived alone with their child, who were the oldest at the time the child was born, and who had the lowest levels of education, were the most likely to have received social assistance. In addition, unmarried mothers receiving assistance were more likely to have come from families who had received such assistance and urban mothers were more likely than rural mothers to have received social assistance. By the time of the third interview, spouses' income was the most important source of income for those mothers who were unmarried at the time they gave birth, followed by public assistance and the mothers' own earnings. At this time interviewers estimated that close to 50 percent of the unmarried mothers were experiencing financial difficulties.

At the end of the 18 months, 60 percent of the unmarried mothers were still single, 20 percent had married and 20 percent were living common-law. The marital relationships of the unmarried mothers also appeared less stable than the married mothers'. Unmarried mothers who lived alone, however, were the ones who most frequently reported feeling isolated and lonely. They had few close friends and little opportunity to participate in recreational activities.

An important question inherent in an analysis of the mothers' circumstances was if, and how, these circumstances affected the development and health of their children and the quality of childcare they received. At the time of birth most of the infants were healthy. A slightly higher percentage of the unmarried mothers had premature babies and babies with low birth weights. Over the next 18 months, the great majority of children progressed well and were within normal developmental ranges for children at this age. More noticeable differences between the children were found with respect to hospitalization and use of the hospital emergency department. The children of unmarried mothers had higher rates of hospitalization, more severe illnesses and longer hospital stays. These children also had more frequent contact with the hospital emergency department, although these contacts were often related to a lack of knowledge about childcare rather than serious medical problems. In fact, there was virtually no difference between the percentage of children of unmarried and married mothers who experienced serious accidents or injuries.

Many of the mothers reported parenting problems. Lack of affordable childcare, for example, was frequently cited as a reason for withdrawing from educational programs and not seeking employment. For the unmarried mothers, parenting problems related to such issues as learning to accept the responsibilities of parenthood, learning how to care for the child and learning how to live on very low incomes. Irrespective of their marital status, however, the mothers reported similar and appropriate approaches to disciplining their children.

Despite the difficulties that many unmarried mothers experienced the majority said they were happy. Nevertheless, they would advise young women to think carefully about becoming unmarried mothers; in their opinion, and from their experience, being an unmarried mother is indeed difficult.

Based on the findings of the first phase of the study, the researchers suggested a number of areas where additional support services or programs were needed. In particular, there was a clear need for more extensive family life education in programs designed to reduce unwanted pregnancies. Also, social service programs needed to be less oriented to mothers placing their children for adoption and better able to provide integrated assistance to young pregnant women with respect to such issues as health, education, financial security and parenting. There was an evident demand for improved housing, flexible educational programs and support to attend these programs through the provision of childcare facilities and training allowances, and assistance with finding employment that would pay livable wages. Finally, programs that teach parenting skills would certainly assist some mothers, as would informal groups of single parents that would, through peer support, reduce the social isolation and loneliness some mothers experienced.

The researchers concluded their report by stressing the study's positive findings. Despite often living in straightened circumstances, most unmarried mothers were managing well as parents. The children were healthy and well looked after.

Phase Two

The mothers in the study were last interviewed in December, 1979. The second phase of the study was designed to document the changes that had taken place over the past nine years and determine how well the mothers and children were managing. Accordingly, the following objectives were established:

1. to identify any changes in the family context of the mother's life;
2. to examine the intellectual, social, emotional and physical development of the children; and

3. to determine whether the age and marital status of the mothers at the time of their child's birth affected their own well-being and that of their children.

In attempting to explain any differences which might occur between the married and unmarried mothers, it was decided to expand the analysis to include the age of the mothers at the time they gave birth. Some of the findings from phase one suggested that differences might, in some instances, be related more to age than marital status. Consequently, this issue was explored in more depth than had been possible in the earlier phase.

To document changes in the mother's circumstances, interviews covered a wide range of issues: marital and family history; housing; educational attainment; employment history; financial circumstances; childcare arrangements; social support; leisure activities; and satisfaction with life. In the area of the children's well-being the researchers focused on the mother-child interactions, the health of the children and the children's out-of-school activities. In addition, detailed assessments of a subsample of children were conducted in order to document their intellectual and social development.

In studying the mothers' circumstances and those of their children, it is important to understand the causes of any differences and go beyond simply describing the situation. Understanding the causes enables researchers to better recommend policies and programs that will assist mothers with young children, which is why the researchers in this phase were interested in knowing the relationship between the mother's original age and marital status and her current circumstances and those of her children.

It must be remembered, therefore, in reading this report that when young and older mothers and married and unmarried mothers are discussed what is referred to is the mother's age and marital status when they gave birth to their first child, *not* their current age or marital status. In this context young refers to mothers who gave birth to their first child when they were 19 years of age or younger, while older mothers are those who were at least 20 years old at the time they gave birth to their first child.

The following chapters contain detailed discussions on each of the issues previously mentioned. In conclusion the report recommends changes in current policies and programmes that must be implemented if the needs of mothers and young children in our society are to be better met.

Footnotes

1. These estimates are based on American data.

   Mott Foundation, *Teenage Pregnancy: A Critical Family Issue*, Flint Michigan, 1981.

   Knowles, Ginny A., and Patricia A. Triple, "Cyesis Program Addresses Teenage Pregnancy and Family Well-Being," *Journal of Home Economics*, Fall 1986, pp. 25-28. Data from this study show that fewer than five percent of the mothers placed their children for adoption.

2. Chilman, Catherine. "Social and Psychological Research Concerning Adolescent Childbearing 1970-1980," *Journal of Marriage and the Family*, November 1980, pp. 793-805.

   Furstenburg, Frank F., Jr.; J. Brooks-Gunn; and S. Philip Morgan, *Adolescent Mothers in Late Life*, Cambridge University Press, 1987, pp. 1-10.

3. MacDonnell, Susan. *Vulnerable Mothers, Vulnerable Children*, Nova Scotia Department of Social Services, 1981, p. 15.

2 METHODOLOGY

This research project followed a longitudinal quasi-experimental design. An experimental group of 416 unmarried mothers and a quasi-control group of 403 married mothers were selected from among those women who gave birth to their first child in a Nova Scotia hospital between July 1, 1978 and February 28, 1979. A comparative methodology was necessary for this project to determine whether the needs of unmarried mothers were significantly different from their married counterparts. The emphasis on life-cycle developments also necessitated the adoption of a longitudinal format because relevant factors, such as family composition, living accommodations, household income and childcare arrangements, frequently change and such variations can affect the well-being of both mother and child. During the 10-year research period, from 1978 to 1988, there were four data collections (see Table 2.1).

TABLE 2.1

Research Schedule

	Starting Date	Age of Child
first data collection	July, 1978	3-6 weeks
second data collection	April, 1979	9 months
third data collection	December, 1979	18 months
fourth data collection	January, 1988	9-10 years

As mentioned in the Introduction, this project was initiated to provide insight into important issues that had not been adequately addressed in earlier research. Although literature searches identified numerous sources that had indirect relevance for the present study, the research was primarily American-based, used small non-representative samples, was cross-sectional rather than longitudinal and provided no control groups. Most studies also focused on single or adolescent mothers but did not integrate these two closely-related areas of investigation.

The U.S. findings may also be quite different from Canadian findings: differences in health care and social assistance programs, for example, create considerably dissimilar milieus in which unmarried mothers must live. Thus, findings and policy recommendations from American-based studies are not directly applicable to Canadian concerns.

The usefulness of existing research is further hampered because none of the U.S. studies used representative sampling procedures. Sample sizes were typically small, ranging from 10-70 cases. For the vast majority of project respondents were selected because of their membership in a particular program or their attendance at a specific clinic. Most of the research also concentrated on minority groups: blacks, Hispanics or refugees. Without exception, these sampling procedures skewed results toward urban residents of low socio-economic status. Thus, the findings cannot be generalized beyond these restricted groups.

Except for the 10-year longitudinal project of Furstenberg et al., many studies involved only one interview with each respondent.[1] This lack of follow-up makes it impossible to assess precisely life-cycle changes that occurred for both mother and child.

A further problem with most of the earlier work is the lack of control groups to assist in the verification of what are considered to be unique characteristics of young and/or single mothers.[2] Without such comparative practices, research cannot untangle similarities or differences in the conditions faced by unmarried and married mothers.

The current study was undertaken to provide a more comprehensive examination of the circumstances and conditions faced by unmarried mothers. The sample was selected to be representative of unmarried mothers in general. In addition, a quasi-control group of married mothers was incorporated for comparative purposes and a longitudinal design was chosen to permit causal analysis of life-cycle events.

Sample Selection

To ensure consistent results, the sampling frame for this project was restricted to mothers giving birth to their first child and who, at the time of birth, had decided to keep their child. Mothers who were uncertain whether to keep their child or who had placed their child for adoption were not included. When distinguishing between married and unmarried participants, women involved in common-law unions were designated as unmarried. A restrictive definition of marital status was maintained because health-care workers felt that social pressures often forced unmarried mothers to report a common-law partner even when no stable relationship existed. Consequently, it was thought that information about common-law relationships was unreliable at the time the sample was selected. In the fourth interview, however, when the mothers reviewed their marital history from the time their first child was born, it was possible to include this information and it is discussed in Chapter 3.

Considerations of patient confidentiality resulted in the initial enumeration and contact with potential respondents being made by medical personnel. Public health nurses and social workers visited the new mothers while they were hospitalized to solicit their participation in the study and to collect basic demographic information. Those women who agreed to take part signed consent forms which contained their names and addresses.

The selection of unmarried mothers (the experimental group) began in July, 1978 and continued through November, 1978. All of the 416 unmarried mothers who gave birth to their first child in a Nova Scotia hospital during that period were asked to participate. All administrators of Nova Scotia hospitals with maternity facilities agreed to assist the research team in developing a sampling frame. Records of hospital contacts were cross-checked with information from the Vital Statistics Division of the Nova Scotia Department of Health and Fitness to identify any omissions of potential unmarried mothers. Proportional selection by county was used to choose the sample of married mothers (the quasi-control group) who gave birth to their first child between July 1, 1978 and February 28, 1979. The number of respondents selected from each county was determined from the average proportion of births that had occurred per county during the preceding 10-year period. In total, 403 married mothers were selected.

While the first three data collections focused exclusively on the 672 initial respondents, the fourth data collection was expanded to include an additional group of 70 young married mothers (83 young married mothers were actually located of which 70 agreed to participate). From the first enumeration, it was clear that the population distribution included a small proportion of married women who were 19 or younger at the time their first child was born. (Table 2.2 gives the age breakdown for the original participants.)

Although the original sample selection provided descriptive information on the characteristics of the married and unmarried mothers that could be generalized, it was sometimes difficult to untangle the independent effects of age and marital status because of the small number of married women in the teenage category. As maternal age is indisputably a primary consideration in the examination of the life consequences of both mother and child, it was necessary to expand the original sample to include a larger number of married women who had their first

TABLE 2.2

Age and Maritial Status of Original Respondents

Age	Marital Status	
	unmarried	married
19 years and younger	224	41
20 years and older	123	284
	n = (347)	n = (325)

child when they were under 20 years of age. Thus, it would be possible to determine whether any differences between the married and unmarried groups were a direct result of marital status or were attributable to the age at which these women had their first child.

With the approval of the Nova Scotia Minister of Health and Fitness and the Nova Scotia Vital Statistics Division, birth certificates were used to identify and locate the additional sample of married teenage mothers who had given birth to their first child during the sampling period. This new group of young married mothers had restricted utility for some facets of the study and was therefore not used in all statistical analysis since certain information was derived from, or compared to, earlier data collections. However, in all other situations the new group of young married mothers were an intrinsic part of the analyses.

Response Rates

Longitudinal research is especially difficult because of the necessity of maintaining current addresses and ensuring the continued cooperation of the original respondents. During the first interview for this project, all participants were given change-of-address cards and requested to send these to the research office if they moved. Upon completion of each of the four interviews, respondents were also asked to provide the names and addresses of contact persons who could help the research team locate them at a later date. While only one contact name was requested during the first three interviews, three names were sought at the time of the fourth interview. Researchers also checked directories and telephoned respondents and their contacts twice during the nine years separating the third and fourth data collections. As an added tracking mechanism, respondents were asked to provide their Medical Services Insurance (MSI) number at the time of the fourth interview, thereby making it possible to use medical records to obtain up-to-date addresses for a future data collection.

Response rates ranged from 73 to 94 percent over the research period (see Table 2.3). While most of the non-responses in the first three data collections were attributable to refusals, the research team was unable to locate 19 percent of the participants for the fourth data collection (see Table 2.4).

TABLE 2.3

Response Rates

	Original Sample Size	No. of Participants First Data Collection 3 to 6 Weeks	No. of Participants Second Data Collection 9 Months (Percentage of Original Respondents)	No. of Participants Third Data Collection 18 Months (Percentage of Original Respondents)	No. of Original Participants Fourth Data Collection 9 to 10 Years (Percentage of Original Respondents)
Married	403	325	308 (95%)	295 (91%)	274 (84%)[3]
Unmarried	416	347	327 (94%)	299 (86%)	215 (62%)
Total	819	672	635 (94%)	594 (88%)	489 (73%)[4]

Even though the response rates of the original sample for this project were relatively high, comparisons were made between the respondents and non-respondents to determine if any bias had been introduced either through initial refusals or eventual attrition. During the enumeration of the study population in 1978, health-care workers collected demographic information and conducted assessments of the financial, housing and personal support conditions of all potential project participants. Comparisons revealed no differences between participants and non-participants in terms of demographic factors, such as age and educational attainment. The respondents and non-respondents in the unmarried group also exhibited consistent ratings on health-care workers' assessments; however, a slightly higher percentage of

TABLE 2.4

Response Rate for Fourth Data Collection

questionnaire completed	559	(74%)
unable to contact respondent	143	(19%)
refused	45	(6%)
deceased	5	(.7%)
completed after analysis began	3	(.3%)

the consenting married mothers were deemed to have serious financial, housing and/or support problems. For the unmarried group, the only distinction was in the area of household composition, with a slightly larger percentage of the consenting women living on their own with their newborns.[5]

Any longitudinal study is subject to a certain amount of attrition; however, this is only of particular concern when the non-respondents are systematically different from the respondents. For example, the married mothers interviewed for the follow-up could be significantly less well-educated than the married mothers who refused to participate or could not be located. If this situation occurred, differences between the married and unmarried mothers might be artificially reduced, making it appear as if these two groups had similar educational backgrounds when, in fact, this was not the case.

Using information from the first data collection, respondents and non-respondents for the fourth phase of the project were compared on a number of important demographic factors: age, education, perceptions of childrearing problems, personal social assistance status and parents' social assistance status. Chi-square analysis showed no significant differences between questionnaire completion or non-completion within either the married or the unmarried groups. The mothers who were interviewed for the final data collection had similar levels of education and were approximately the same ages as the mothers who refused to participate or could not be located. The respondents were also no more, or no less, likely than the non-respondents to have perceived themselves as experiencing problems with parenthood. Similarly, no differences in personal or parental social assistance use were identified.

Data Collection Methods and Instruments

A variety of different data collection techniques and instruments were required to cover the diversity of issues in the study. Interviews were conducted with the mothers; the children's hospital records were examined; and psychological and educational assessments were administered to the children.

Interviews

All four data collections included interviews with the mothers using structured questionnaires containing both open and closed questions. Although closed questions have numerous advantages in terms of condensing information and facilitating coding and analysis, respondents must also be given an opportunity to express themselves in their own words. The questionnaires were designed as multi-purpose instruments to obtain information on the mother, the child and their interaction. Particular emphasis was placed on childcare arrangements, support networks, health, family composition, living accommodations, and educational, employment and income factors.

In some areas, identically-worded questions were retained throughout the four research periods to ensure the collection of directly comparable information; however, other questions requested retrospective accounts, which served to bridge the gap between contacts. The retrospective accounts for the fourth questionnaire began at the time of the child's birth rather than proceeding from the prior data collection when the child was 18 months old. This strategy was adopted because the 18-month period was not anchored to a sufficiently significant life event to trigger recollection, and total accounts permitted comparisons with the responses of the additional group of young married mothers from whom no previous information had been obtained. Furstenberg et al., in their ground-breaking work on adolescent mothers, also adopted childbirth as the starting point for retrospective accounts during later data collections.[6]

Questionnaire pre-testing was conducted with women who had given birth to their first child in 1978 but had not been selected for inclusion in the study. Ten mothers were interviewed prior to the fourth data collection. Six of the respondents were married and four were not. One of the mothers was unable to read and this provided an opportunity for researchers to test the alternative procedures designed for illiterate respondents.

All interviews for the first three phases of the project, and the majority of interviews for the fourth phase, followed a personal format and were conducted either in the respondent's home or at a public place selected by the respondent. During the fourth data collection, a modified questionnaire was designed to permit telephone interviews with mothers who had moved outside the province, and, as a last resort, an abbreviated, self-administered questionnaire was mailed to those individuals who refused to be interviewed in person. (Table 2.5 gives the distribution of completed face-to-face, telephone and mail questionnaires for the fourth phase.) Face-to-face interviews ranged from three-quarters of an hour to two hours; the average length was one hour. Telephone interviews were shorter, ranging from 20 to 40 minutes, with an average length of 30 minutes.

TABLE 2.5

Questionnaire Formats for Fourth Data Collection

face-to-face	502	(90%)
telephone	38	(7%)
mail	19	(3%)
total	559	100%

In those cases where personal interviews were conducted, mothers were asked to sign a consent form giving the researchers permission to access MSI files and to administer psychological and educational tests on their child. To prevent inconsistencies, all data collection for the fourth phase of the project was scheduled during a school term.

Hospital Records

In addition to conducting personal interviews, hospital records were used to verify and expand on the mothers' recollections of the health care obtained for their children. The research team was granted permission to access the patient files of the local pediatric hospital, The Izaak Walton Killam Hospital For Children. File searches were undertaken at the time of the third and fourth data collections to determine the number of visits to the emergency department, the number of Hospital admissions, the lengths of hospitalization and the types and severity of the children's medical problems. All diagnoses and assessments of severity were coded and/or checked by qualified medical personnel.

The hospital component of the research was restricted to Halifax-Dartmouth and the remainder of Halifax County because residents in this area have direct access to the pediatric facility. A search of the records indicated that at the time of the fourth data collection 278 of the original respondents had been, or were currently, living in Halifax County. For these respondents, 106 children had been admitted to the Hospital at some time and 210 had visited the emergency department.

Psychological and Educational Assessments

While the first three phases of the project concentrated exclusively on mothers' reports and file searches, by the time of the fourth data collection the children were old enough to participate in the research themselves. Through the co-operation of the Department of Education and District School Boards, psychological and educational assessments were conducted during school time.

Two hundred and twenty-three children of a possible 232 participated in the study. The children were grouped according to their mother's marital status and age at the time of their birth. The four groups consisted of: 55 children whose mothers were unmarried and 19 years or younger at the time of their birth; 47 children whose mothers were unmarried and 20 years or older at the time of their birth; 60 children whose mothers were married and 19 years or younger at the time of their birth; and 61 children whose mothers were married and 20 years or older and married at the time of their birth.

The actual sample represented 96 percent of the 232 children randomly selected to be part of the study. The nine children who did not participate in the study could not be located at the time of testing, were ill or the parent refused consent during the follow-up telephone contact pertaining to the assessment.

All assessments were conducted by a psychometrist under the direction of a psychologist, and took place in the school that the child attended. The co-operation and permission of each school district in Nova Scotia was obtained from district directors of education, individual school principals and teachers following the mother's consent to carry out the assessment. As well, the co-operation of each child was gained such that only children who agreed to the assessment were included. All children agreed to be assessed. The assessment period generally covered three to four hours with necessary breaks. While the period for assessment was generally completed in one day, on some occasions two days were necessary. Results of the assessment were provided to the mothers and to school officials in those cases where permission was granted by the mother.

All children received the Wechsler Intelligence Scale for children-Revised (WISC-R) to determine their intelligence quotient (IQ); the Peabody Picture Vocabulary Test-Revised (PPVT-R) to determine their vocabulary; the Basic Achievement Skills Individual Screener (BASIS) to determine their current academic achievement in reading, math, spelling and writing; the Beery Visual Motor Integration Test (Beery) to determine their level of hand/eye co-ordination; and the Piers-Harris Self Concept Scale (Piers-Harris) to determine their perceptions of their self-image. The classroom teacher with the most contact hours was asked to complete the Achenbach Behavior Rating Profile (Achenbach-T) to determine the child's behaviour relative to a range of behaviours including social withdrawal, aggression, attention and activity. As well, mothers were asked to complete the Achenbach Behavior Rating Profile (Achenbach) to determine the child's behaviour as viewed by the mother in the areas of social withdrawal, activity and aggression.

Statistical Analyses

The statistical annalyses used in the study are described in Appendix B.

Footnotes

1. Furstenberg, F. Jr. et al. *Adolescent Mothers in Later Life*. New York: Cambridge University Press, 1987.

2. Phipps-Yonas, S. "Teenage Pregnancy and Motherhood: A Review of the Literature". *American Journal of Orthopsychiatry*, Vol. 50(3), July 1980, p. 420.

3. One mother, who was selected to be part of the original sample, did not participate in any of the first three data collections but was located and interviewed for the fourth data collection.

4. Seventy of the 83 new young married mothers contacted for the fourth data collection agreed to participate in the research, yielding a final response rate of 84 percent for this group. Thus, a total of 559 respondents were interviewed for the fourth data collection.

5. MacDonnell, S. *Vulnerable Mothers, Vulnerable Children*. Nova Scotia Department of Social Services, 1981, pp. 22-23.

6. Furstenberg, F. Jr., et al., 1987, p. 13.

3 FAMILY

Background Literature

Recent analyses of Canadian families indicate that the diversity of our family system is one of the most significant characteristics of contemporary society.[1] Eichler, for instance, notes that it is no longer possible to talk about "the family" and expect people to have a shared understanding of whom or what is being discussed. The long-standing bias in the literature on families to over-estimate the uniformity of family structure and function is challenged by current reality.[2]

Family life has become increasingly complex and less subject to easy generalizations. In one generation Canadians have experienced dramatic changes: fertility rates have decreased while life expectancy has increased; divorce rates have escalated; more women have participated in the labour force than ever before; and there have been changes in pivotal household roles, such as child care.[3] All of these factors have affected the structure of the family and caused a major redefinition of the family and its functions.

One of the most significant factors affecting family life in Canada has been the decline in the fertility rate, which has decreased steadily throughout the century except for the baby boom, a 15-year period following the Second World War. As a result of this post-war boom, Canada's fertility rate reached its highest level in 1959 then declined rapidly over the next 20 years (see Appendix A, Table A2). There were 3.9 births per woman in 1959 – but only 1.7 in 1978. This rate has remained fairly steady[4] and has resulted in the generally small family size of the last 30 years, in which few women bear more than two children.

Equally significant changes have occurred in the age and marital status of women giving birth. In the last 20 years, Canadians have generally been marrying and having children at an older age. But it is also the case that an increasing number of women and men are staying single and that more unmarried women are bearing children.

Since 1967, there has been a downward trend in the marriage rate of Canadians (see Appendix A, Table A3). While social scientists generally attribute fluctuations in this rate to fluctuations in the economy, there is no comprehensive explanation for this long-term decrease.[5] The factor most often cited is the increase in common-law unions. But this, a characteristic of young people, may form only part of the explanation for the declining marriage rate. Whether common-law unions constitute a rejection of marriage or are simply another step in the marriage process is unknown. Research from Europe provides contradictory evidence. Studies in France and Sweden conclude there is a rejection of traditional marriages by some young people, while British data suggests that cohabitation is responsible for couples delaying, but not rejecting, marriage.[6]

Common-law unions are difficult to document since by their very nature many such relationships can be entered and terminated without any formal record in an individual's change of status. Consequently, estimates of common-law unions may not be particularly reliable. The 1981 Canadian census data indicate that approximately six percent of couples were involved in common-law relationships and the majority of these individuals were under 30 years of age.[7] Data from the Canadian Family History Survey indicate that among 18- to 29-year-olds, 29 percent of females and 25 percent of males had lived in a common-law union by the time they were 25 years of age. Most of these unions are of short duration, since the couples marry or terminate their relationship fairly quickly. Based on the Survey data, less than a quarter of these relationships last more than five years.[8]

When the number of common-law unions are combined with the number of marriages, the rate is similar to previous marriage rates. Thus, there is less movement away from marriage or marital partnerships than might be thought on the basis of marriage rates alone. Indeed, the rejection of marriage may have more to do with form than with any desire to live without a partner, but it is still too early to say whether young Canadians are forming common-law unions as an alternative to traditional marriage or as a step on the way to becoming married.

Women are also entering marriage at an older age than previously (see Appendix A, Table A3). Consequently, they are bearing children later in life than women in the 1950s and 1960s. In the 1960s, women had their first child at an average age of 23.5 years; by 1980 this figure had risen to nearly 25 years.[9] A further change is also evident with respect to the spacing of children. Although there is no national data on child spacing, studies in Quebec and the U.S. suggest that women are now married longer before they have their first child and are allowing a longer time to lapse between the birth of the first and second child. In Quebec, women marrying between 1951 and 1960 gave birth to their first child, on average, 23 months after marriage, while women married between 1966 and 1970 had their first child 28 months after marrying. Similarly, the average interval between the first and second child increased from 32 to 43 months for the same two periods.[10]

These changes in fertility patterns are reflected in the differing fertility rates for women in different age groups (see Appendix A, Figure A1). Prior to 1970 women 20-24 years of age traditionally experienced the highest fertility rate, but this changed noticeably in the 1970s. Nowadays, women 25-29 years of age have the highest fertility rate.

The youngest women, those 15-19 years, have fertility patterns different from the older age groups. Until the mid-1940s their fertility rate was relatively stable and did not decline as did the rate of other age groups. After a significant increase between 1945 and 1960, fertility rates of younger women fell, as did the rates for older women, although the decline for the youngest group was not as dramatic as for the older group. The fertility rate of 15- to 19-year-old women is now comparable to that of the late 1920s and 1930s. These figures suggest that the fertility patterns of young women are influenced by different factors than those affecting older women.

While Nova Scotia follows these general fertility patterns, it should be noted that over the last decade the Province's fertility rate for women 25-29 was lower than the Canadian average. For the youngest women the Nova Scotian rates are higher than the national rates, although they too are declining. Nova Scotia, therefore, has a higher rate of younger mothers than the country as a whole (see Appendix A, Table A4).

Another factor that has drawn considerable attention is the difference between the decline in marital fertility rates compared to the fertility rates of unmarried women. Although changes in definitions make the examination of long-term trends difficult, the general changes are not in dispute. Between 1951 and 1986, the number of births to unmarried women rose from nearly 14,000 to 62,976 (see Appendix A, Table A5). As a percentage of all births, this represented an increase from four percent in the 1950s to 13 percent in 1980 to 17 percent by 1986 (see Appendix A, Table A4). The fertility rate for unmarried women increased from 13.46 in 1951 to 23.89 in 1982 and runs counter to the overall decrease in such rates. While the rate appeared to have levelled off in the 1970s, recent data suggest that this trend has been reversed with increases in the fertility levels of unmarried women now occurring. As mentioned in the

Introduction, the majority of births to unmarried mothers nowadays are to women 20 years and older. The concern about teenage mothers continues, however, because over half the births in this age category are to mothers who are unmarried.

While changes in fertility rates and patterns of childbearing have resulted in a changed family system, a further important factor in family change is the increase in divorce. Increased rates of divorce are the most significant factor in the increase in single-parent households, despite the fact that many divorced people remarry.[11]

From 1970 to 1982, the number of divorces and the divorce rate increased steadily (see Appendix A, Table A6). Since 1983, however, the rate has stabilized and there has actually been a slight decline. It is still too early to know if there is either a new trend with respect to divorce or whether the divorce rate will continue to decline. At the current rate approximately one in three marriages will end in divorce.[12]

Factors leading to divorce range from changes in the laws governing divorce, which undoubtedly accounted for the large increase in the number of divorces in Canada in the late 1960s, to economic, social and psychological factors.[13] Although research findings are not consistent, one factor on which there is fairly strong agreement is that early marriages result in higher rates of divorce than do marriages in which the couple married in their mid-20s or later.[14] In addition, low levels of educational attainment are related to a high risk of marital disruption.[15] These two factors may work together — early marriage may prevent or hinder people from completing their education. This appears to be the case more so for women than men.[16] Conversely, a lack of educational attainment may predispose people, especially women, to early marriage in the belief that marriage is a path to economic security that is otherwise not available.

Although factors such as early marriage are clearly correlated with high rates of divorce, the reasons for this association are a matter of speculation rather than well-documented evidence. Some explanations focus on the short time couples have known each other before marrying and the lack of maturity of the partners. In particular, people in their late teens and early 20s are likely to experience significant change in their lives as major decisions are made about such issues as employment, education and family. Such events may well increase the possibility of conflict over priorities and diverging values. Lack of maturity and low levels of education may also mean that couples are less able to deal with the strains of marriage since they are less able to understand and adapt to changing circumstances.[17] Low levels of education are also associated with lower-paying jobs, and economic problems can be a major source of marital conflict.[18]

A further factor associated with high rates of marital disruption is the sequencing of marriage and the birth of the couple's first child. Research in this area has focused on marriages in which there were premarital pregnancies or births compared to marriages where the first birth took place after marriage. Higher marital disruption rates for marriages where there has been a premarital birth may be a result of the greater difficulties in marital adjustment when there is already a child in the household.

In addition, there may be more severe economic pressures on the marriage from the beginning and in cases where a husband is not the biological father of the child the couple may not be as strongly tied by their affection for the child. Women who enter a marriage having previously given birth have already experienced single parenthood, and they may, therefore, be unwilling to live with an unsatisfactory marriage because they know they can cope as a single parent. Reasons such as these are thought to account for research findings that indicate premarital births do increase the risk of marital breakdown.[19] While similar reasons are cited for the possible association between premarital pregnancy and marital disruption, the research is not consistent on whether premarital pregnancies do place marriages at higher risk.[20]

Most divorces in Canada involve children. Where children are involved, mothers have custody in approximately three-quarters of the cases.[21] Chiefly as a consequence of divorce the majority of single-parent households (just over 75 percent) are headed by women with many women being responsible for these households throughout the period of childrearing.

The number of single-parent families in Canada has increased substantially over the past 10 years.[22] From 1976-1986 female single-parent families in Canada increased from 464,340 to 701,900 — an increase of more than 50 percent.[23] While there have always been single-parent families in society, the number of such families and the reasons for their formation today are different from those of previous generations. In the past, widowhood was probably the most common reason such families were established. Consequently, women were typically into middle age when their change in marital status occurred. Currently, the major reasons for single parenthood are related to the changed patterns of nuptuality, i.e., marriage trends, common-law unions, separations and divorces.

Given the changes in the rate of marriage and the age at which people now marry, single parenthood may be the only stage in family formation; it may be the first stage, followed by marriage; it may be a stage between the dissolution of one marriage and the formation of a subsequent one; or the final status. Single parenthood, therefore, is a complex issue since the reasons for such families are diverse and may be preceded or succeeded by a variety of other unions. While the rise in births outside marriage is an increasingly common reason for single parenthood, 70 percent of single heads of households exist because of separation or divorce.[24] National data also indicate that women who become single parents are more likely to have had their first child as a teenager and are more likely to have been in a common-law union at some stage.[25]

Although the trends relating to marriages, divorces and births can be documented fairly extensively, caution must be exercised when comparing those figures to the figures in this study. This study was specifically designed to investigate the circumstances of young and older mothers, both married and unmarried, but the distribution of these characteristics in the study sample does not reflect the distribution of the same characteristics in the province as a whole. Consequently, differences between the study figures and those from other sources most likely reflect factors related to the specific design of this study.

Results

The following section examines the family circumstances of the mothers in this study. Specifically, changes in marital status and family composition are reported.

Changes in Marital Status

Of the mothers interviewed in 1978-1979, 49.2 percent were married and 50.8 percent were unmarried. However, in tracing the mothers for the fourth interview, more married than unmarried mothers were located. With the inclusion of the additional sample of 70 young, married mothers in the fourth interview, the final distribution of mothers by original marital status as of 1978-1979 was 61.6 percent married and 38.4 percent unmarried. At the time of the interviews in 1988-1989, the marital statuses of the respondents were 75.8 percent married, 10.7 percent divorced or separated, 0.4 percent widowed, 7.5 percent single and 5.7 percent in common-law unions (see Table 3.1).

TABLE 3.1

Marital Status of Mothers

Status	1978-1979	1988-1989
married	61.6%	75.8%
divorced/separated		10.7
widowed		0.4
single	38.4	7.5
common law		5.7

Over the 10-year period, 81.0 percent of the unmarried mothers changed their marital status, i.e., married or entered common-law unions, while only 18.2 percent of the married group formally or informally changed their status by separating, divorcing, being widowed or entering a common-law union. Thus, 81.8 percent of the married mothers are in the same marriage as they were when the study began. That 81.0 percent of the unmarried mothers should change their status is, perhaps, not unexpected given that most of these mothers were young and a high rate of marriage would be expected for women in this age group.

What these figures demonstrate is that, for most of the unmarried mothers, having a child before marriage does not detract from subsequent possibilities for marriage. Concern about unmarried motherhood has centred not only on the well-being of the children in such situations, but also on whether the mothers lead more disadvantaged lives as a consequence of childbearing outside marriage. With respect to marriage, the majority of unmarried mothers join the majority of women in society and do marry.

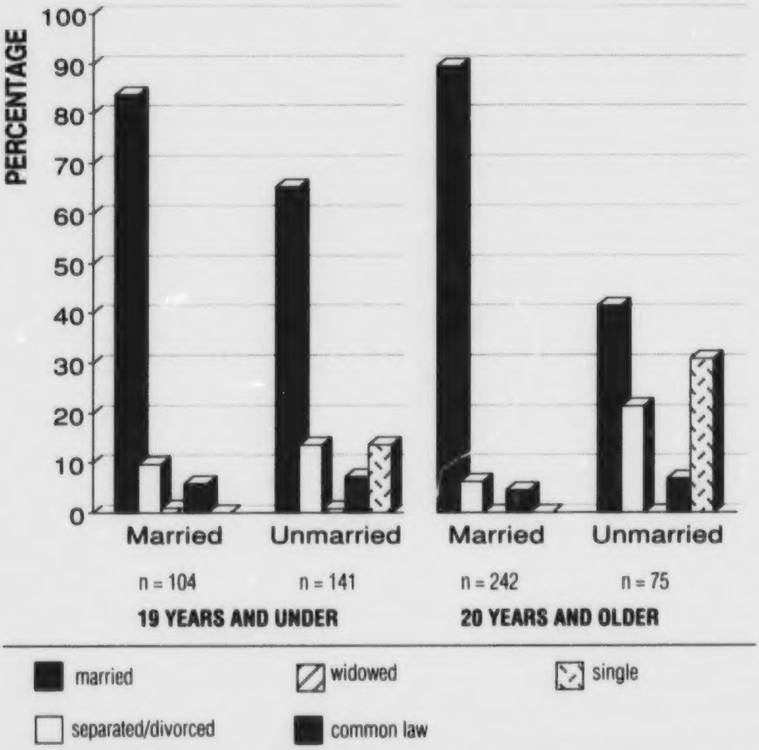
With respect to the effect of age on marital changes, however, it is apparent that changes are not experienced to the same extent by the young and older groups. Figure 3.1 shows the marital status for the mothers at the time of the last interview by their original age and marital status.

Young married women, those 19 years and under at the beginning of the study, have a higher rate of marital change than those 20 years or older. Twenty-three percent of the young married women versus 16 percent of the older group had changed their marital status during the 10-year study period, i.e., separated, divorced, or entered a common-law relationship.

For the unmarried group, the young women again exhibit higher rates of change. A significant majority of those 19 or

FIGURE 3.1

Current Marital Status of the Mothers By Original Age and Marital Status



under did marry (87.3 percent); in the older group, while most of them changed their marital status (69.4 percent), a substantial number (30.7 percent) remained single. Thus, the percentage of older women remaining unmarried is double that of the young women. Although having a child before marriage does not appear to be an impediment to subsequent marriage in most instances, data from this study indicate that older women in particular may not enter marital relationships and consequently, have a family situation that is distinct from other groups in society. It is also apparent that when the unmarried mothers marry they subsequently have higher rates of separation and divorce and are more likely to be in common-law unions in comparison with married mothers.

While some respondents report as many as six changes in marital status from the time of the initial interview, most of the women do not experience such a high number of changes. An examination of the distribution of changes by age, shows that overall, 60 percent of the women 19 years and under and 28.7 percent of the women 20 years and older experience at least one change in their marital status. These figures decrease to 22.8 percent and 15.7 percent for those experiencing two changes, and to 8.5 percent and 4.7 percent for three changes. Few women experience more than three changes. Indeed, out of all the women who had a change in marital status, only 4.6 percent reported more than three changes.

Figure 3.2 documents the types of changes in the marital status of the mothers. For the first two changes, the figures show the changes according to the mothers' original age and marital status. For the third change, the numbers are so small that the same breakdown of the data cannot be given.

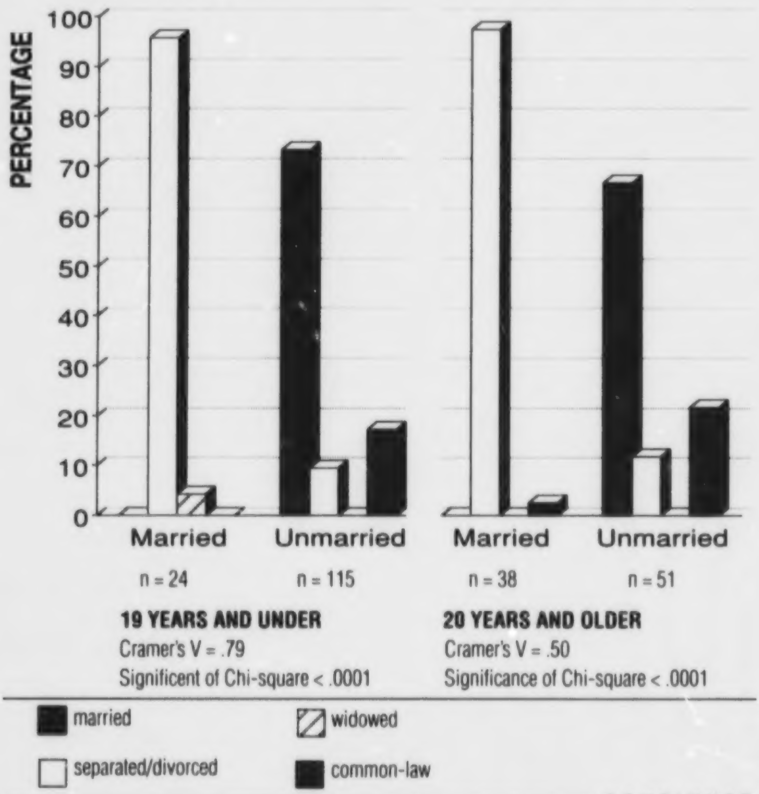
As expected, of those who experienced change, the first change for married women is usually separation or divorce (96 percent) and for unmarried women to enter some form of partnership (71 percent). While most of the unmarried women married (73.3 percent of the young mothers and 66.7 percent of the older mothers), 20 percent entered common-law relationships. It is the older unmarried mothers who are somewhat more likely to enter common-law relationships (21.6 percent) than the young unmarried mothers (17.2 percent).

It is the second change in marital status when married women are more likely to enter a common-law relationship (40 percent), usually after separation or divorce. In contrast to the unmarried mothers, more of the older married mothers (42.3 percent) enter common-law relationships than young married mothers (35.7 percent). Conversely, a much higher percentage of the young married mothers (64.3 percent) remarried as their second change in marital status than was the case for the older mothers (38.4 percent). For the unmarried mothers, however, this second change is associated with separation or divorce (65 percent), this being the case for more of the older unmarried mothers (75 percent) than for the corresponding young group (59.5 percent). Thus, the pattern for married mothers is to divorce and then enter a common-law relationship or remarry, whereas the unmarried mothers marry or enter common-law relationships and then experience separation or divorce.

FIGURE 3.2

Changes in Marital Status by Mother's Original Age and Marital Status

FIRST CHANGE



CONTINUED

Because the numbers are small, especially for the married mothers, the figures for the third marital change must be interpreted cautiously. They suggest, however, that for the unmarried mothers establishing a common-law union is the most likely occurrence.

The marital histories of the mothers, therefore, appear to follow a fairly similar pattern although starting initially in different ways. In essence, the unmarried mothers are one stage behind their married counterparts. There are, however, noticeable

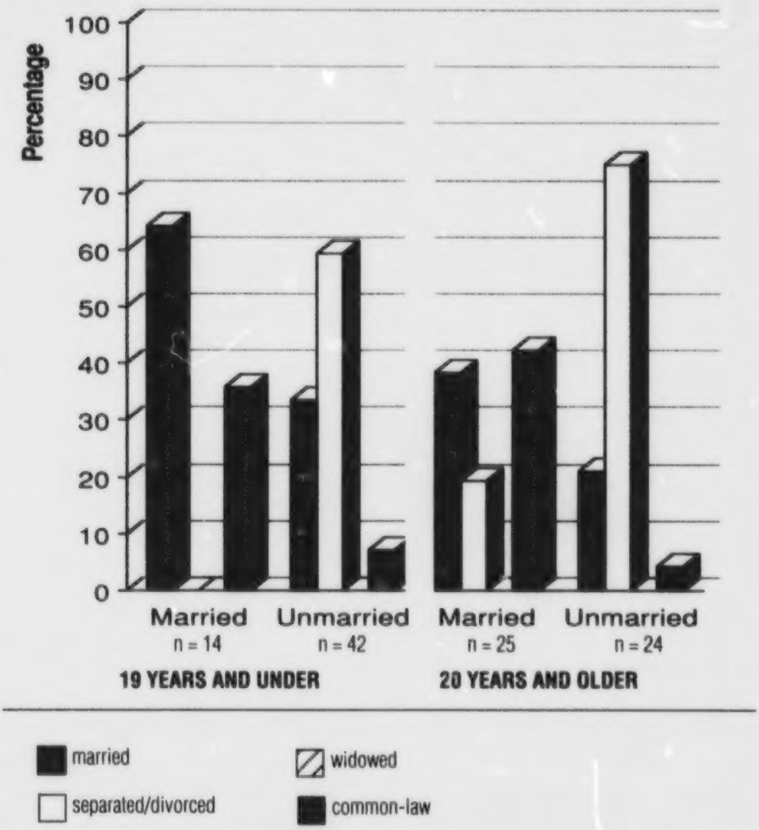


Figure 3.2 continued

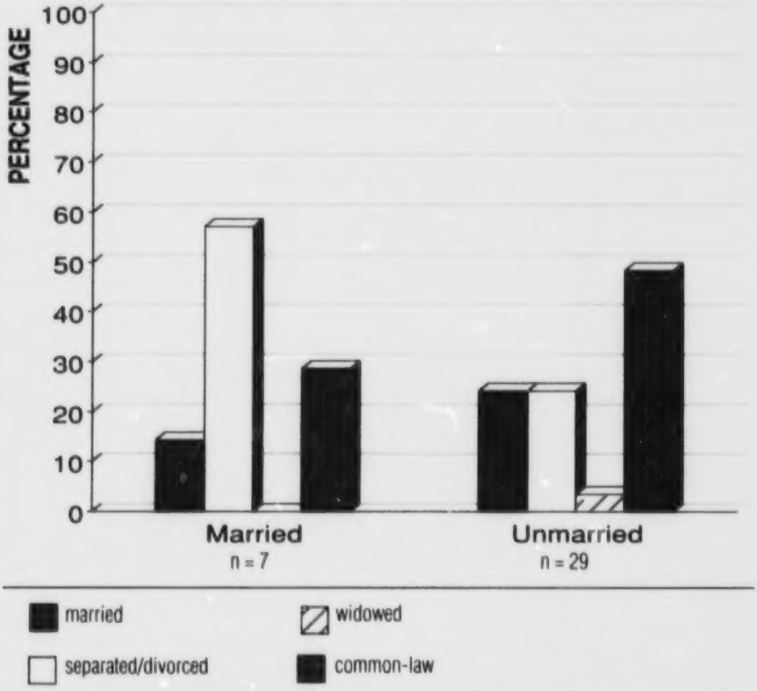
SECOND CHANGE

CONTINUED

similarities between the groups. The younger mothers for instance experience more changes than the older mothers irrespective of their original marital status. Unmarried mothers are more likely to have lived in a common-law relationship over the time of the study but in looking at all groups of mothers it is apparent that older mothers, irrespective of their original marital status are more likely to enter such a relationship than are younger mothers.

Although the duration of some of the changes is open-ended given that only 10 years of the mothers' family life is dealt with, *Figure 3.2 continued*

THIRD CHANGE



some conclusions are evident. The duration of each of these changes in marital status reflects the fact that the first change for married mothers may be a more transitory status than the second change when many separated and divorced women enter new relationships (see Figure 3.3)

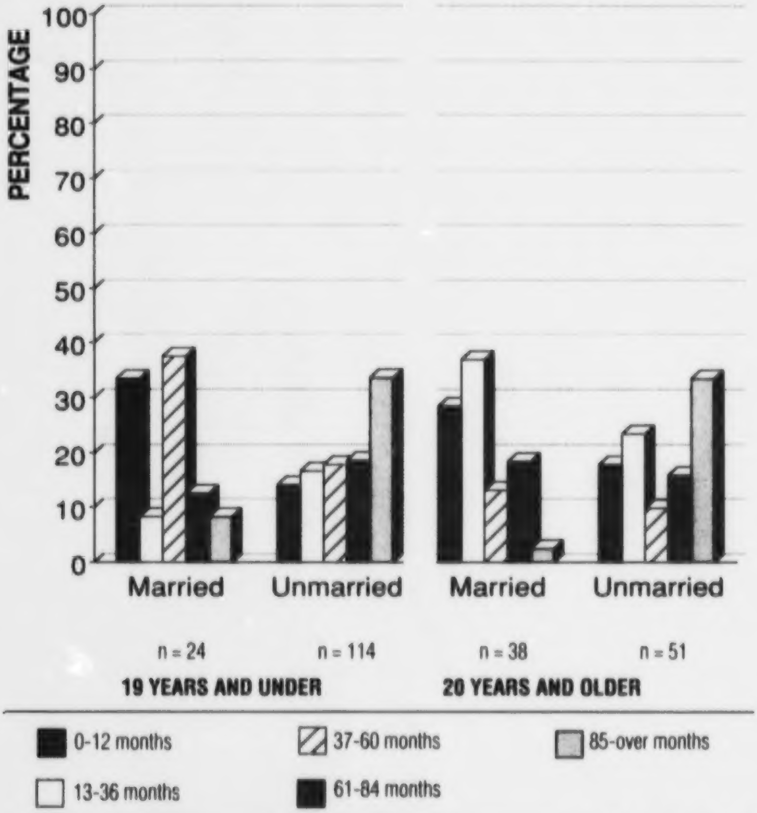
For the unmarried mothers, the first change which is most often marriage, is of longer duration. For instance, for 33.5 percent of the young married mothers and 28.5 percent of the older married mothers, their first marital change lasted a year or less. These figures compare, respectively, with 14.2 percent and 17.7 percent for unmarried mothers.

Conversely, a third of each of the unmarried groups was in the same relationship after seven years. When the duration of the second and third changes in marital status is examined, however, the trends are not so clear, except that fewer mothers

FIGURE 3.3

Duration of Changes in Marital Status by Mother's Original Age and Marital Status (Months)

FIRST CHANGE



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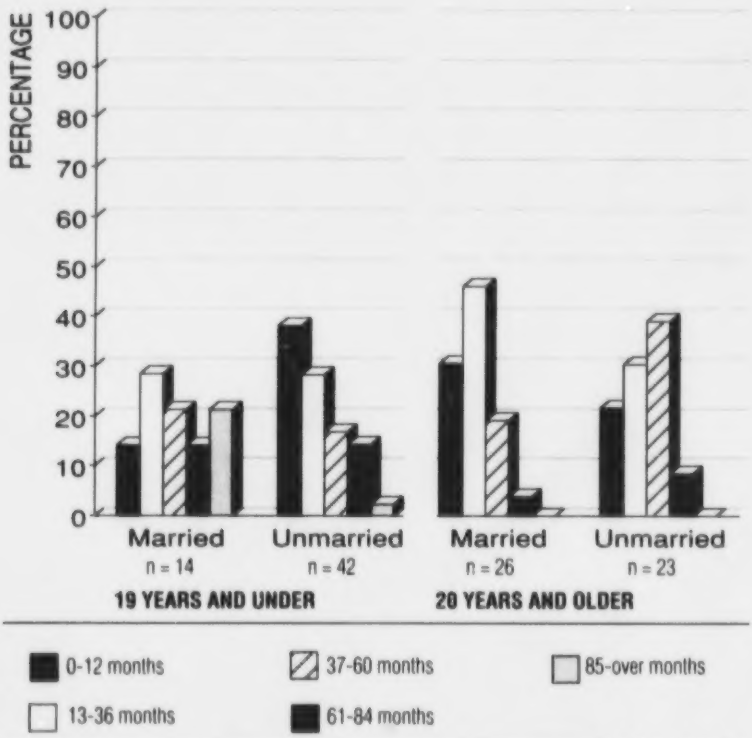
have changes that last five years or more. The duration of the various changes in marital status is documented further by the fact that although the total number of changes is different for the married as opposed to the unmarried group (62 versus 165), the average length of the changes is identical — nine years and seven months.

Figure 3.3 continued

SECOND CHANGE



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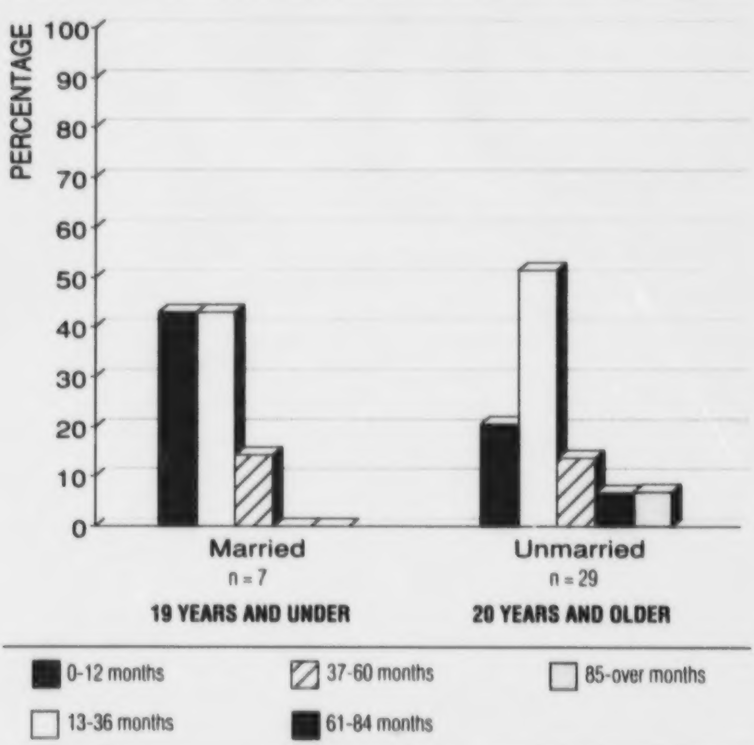
These figures speak not only to the duration of the change but to the fact that more of the unmarried mothers changed their status soon after their first child was born and hence have had the possibility of maintaining a new relationship over several years. Of the young unmarried mothers who changed their marital status, 62.6 percent did so within three years of the birth of their first child, as did 79 percent of the older unmarried group. For the married mothers who changed, 41.8 percent of the young and 36.8 percent of the older group changed status within this period.

The figures discussed so far in this Chapter indicate the relative stability of marriages for the older married group of

Figure 3.3 continued


THIRD CHANGE

women, a higher rate of marital breakdown for the young married mothers and the fact that most of the unmarried mothers became married during the 10 years after the birth of their first child. These trends and the question of whether the marriages of the formerly-unmarried mothers are relatively stable can be summarized by the index of dispersion, which gives a statistical summary based on the number of marital statuses and the duration of each status.[26] This index has a value of 1.0 if the mother has not changed her marital status during the 10-year period and increases with the number of changes in status.

Consequently, a comparison was made between the married mothers and those mothers who, formerly unmarried, became married or entered a common-law partnership as their first change in marital status. In essence, a comparison for stability was made among the women who were, or had ever been, married. This procedure was used since it can be argued that the index is biased against the unmarried group, since by its very nature, a higher rate of change would be expected for this group. The index of dispersion shows that for both young and older women, those who were unmarried when they gave birth to their first child had higher rates of marital instability than those who were married. For the 19 and under age group, the index for married mothers was 1.08 and for those who became married 1.29 ($t = -3.37$, $p < .001$, $n = 202$), and for the 20 and older group, 1.07 for the married mothers and 1.50 for those who became married ($t = -6.30$, $p < .0001$, $n = 285$). What is particularly noteworthy is that it is the older mothers that marry who have the highest rate of instability. This finding again suggests that the older unmarried mothers constitute a distinctive group whose experiences do not coincide with expected patterns.

The mothers who were married or living common-law at the time of the fourth interview report high levels of satisfaction with their partners. Although satisfaction with life and various individual dimensions are discussed more fully in Chapter 9, it should be noted that levels of satisfaction with partners were the highest of all of the dimensions studied for all young mothers and the older married mothers. Level of satisfaction with partner was rated third highest by the older unmarried mothers.

Only 6.5 percent of the married mothers and 6.7 percent of the unmarried mothers reported being "dissatisfied" or having "mixed feelings" about their partners. Over 90 percent of the mothers, therefore, reported being "satisfied", "very satisfied", or "delighted" with their partner. Of the married mothers 26.3 percent, and 29.5 percent of the unmarried mothers, indicated the highest level of satisfaction, i.e., being "delighted" with their partners. For the mothers currently in marital relationships this aspect of their lives is clearly rated very positively.

Family Composition

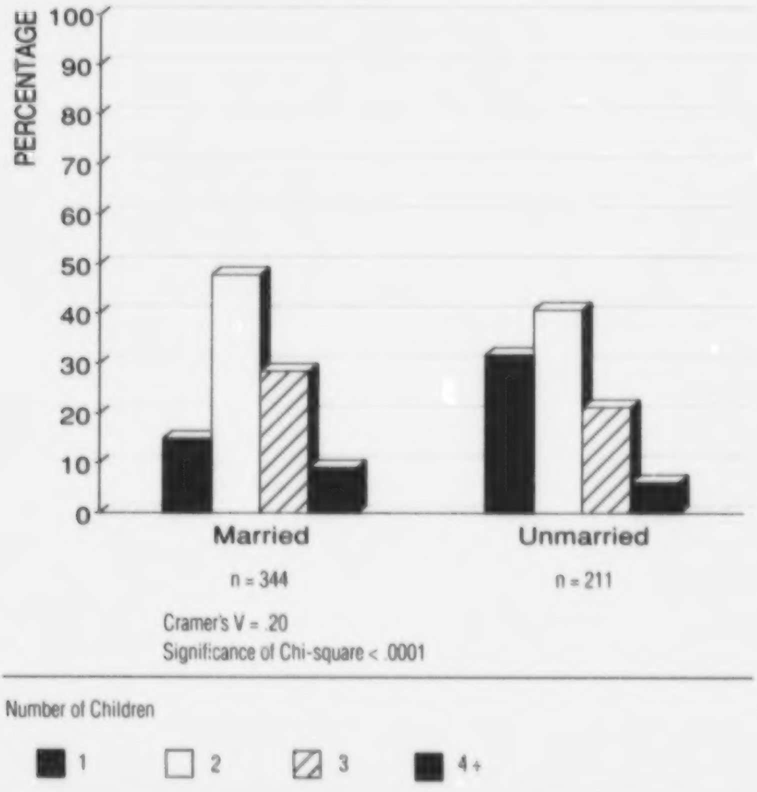
Having looked at the issue of marital status, it is necessary to examine more closely the types of family situations in which the mothers and children live. While the "normal" family structure is frequently held to be a nuclear family consisting of wife, husband and children living in their own dwelling, this arrangement is often not possible because of marital breakdown, the cost of maintaining a separate home or for other family reasons, such as caring for parents or other relatives. Family composition is of importance not only because it may indicate the levels of assistance and support available to mothers with young children, but because it also indicates some of the circumstances in which children are raised.

The majority of mothers in the study (78.7 percent) had at least one more child following the birth of their first child in 1978-1979. Sixty-six percent of the mothers have one or two children, while a third of the study group has three or more. The average number of children borne by all the women in the study is 2.16. There are, however, significant differences in the numbers of children borne by the married and unmarried groups. The mean number of children for the married group is 2.31 and for the unmarried group 2.01 ($t = 3.99$, $p < .0001$, $n = 555$). To look at this issue further, two groups of mothers who represent the extreme categories with respect to marital status were considered. One group of mothers was those who had never married or been in a common-law relationship; the second group was the women who had been married continuously throughout the study. The average number of children for the never-married group is 1.55 and for the always-married group, 2.40 ($t = 5.89$, $p < .0001$, $n = 323$).

These figures are surprising given the concerns expressed in the literature, primarily American, that unmarried mothers, and particularly young unmarried mothers, will have more children and in quicker succession than married mothers. The evidence from this study is to the contrary. Unmarried mothers are more likely to have only one child (31.8 percent versus 14.8 percent of the married mothers) and less likely to have three or more children (27.5 percent versus 37.5 percent) (see Figure 3.4).

FIGURE 3.4

Number of Children Born to Married and Unmarried Mothers by Original Marital Status



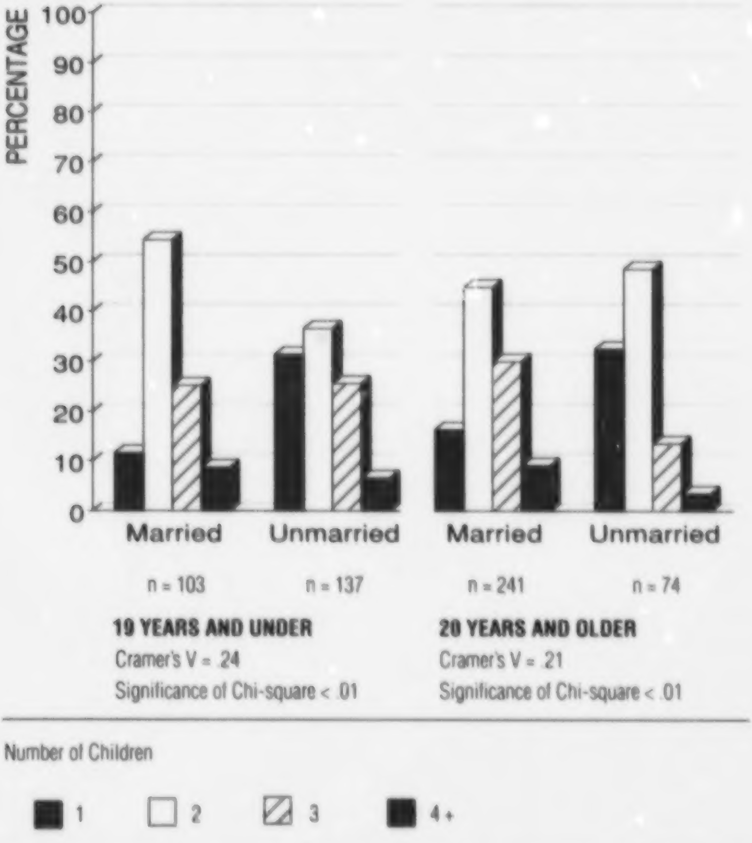
Cramer's V = .20
Significance of Chi-square < .0001

This relationship holds for both the young and older groups of mothers, although the older unmarried mothers are considerably less likely than other groups to have more than two children (see Figure 3.5). Eighty-one percent of the older unmarried group had only one or two children.

The average number of years between children is also different for the two groups. On average, the unmarried group waited 5.2 years between having children and the married group 4.4 years (t=-3.02, p < .001, n = 401).

FIGURE 3.5

Number of Children Born to Married and Unmarried Mothers, by Original Age and Marital Status



Although these figures are impressive in laying to rest the notion that unmarried mothers have more children, and in rapid succession, caution is necessary since few of the mothers have completed their childbearing years. As the mothers ranged in age from 14 to 37 years in 1978-1979, the majority still have time to bear additional children. Indeed, the mean age of the married mothers at the birth of their first child was close to 24 years, which is slightly younger than for the country as a whole. Nevertheless, the differences in the numbers of children to date are noteworthy.

Other aspects of family composition primarily reflect the mothers' marital situations. For instance, over the 10-year study period there have been significant shifts in household composition and noticeable differences between the married and unmarried groups. Overall, there has been an increase in mother/child households (from 5.0 percent at the first interview to 13.7 percent at the fourth) and in nuclear family households (from 54.9 percent to 78 percent). Conversely, there has been a noticeable decrease in households where the mother and her child live with the mother's parents (13.4 percent to 1.6 percent) or with her parents and other family members (18.6 percent to 1.1 percent). (See Figure 3.6)

There is no clear trend for households where the mother, child and husband share accommodations with others. This may be because this household type could include households where a couple in early married life shares with one set of parents, or could represent a later stage where relatives, perhaps elderly ones, come to live with the married couple.

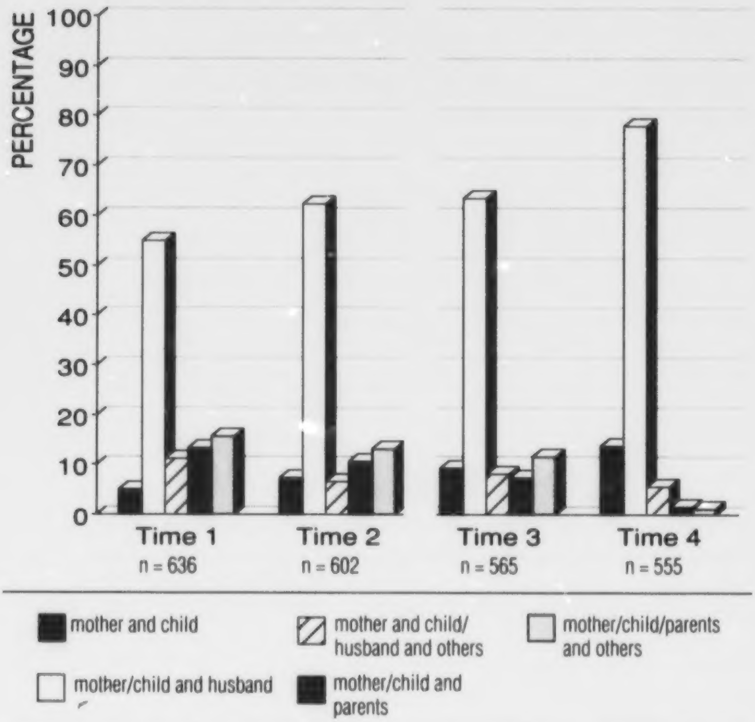
The general trends in family composition are related to the changing circumstances of the married and unmarried groups. Table 3.2 documents these changes in detail.

Immediately after the birth of the first child, the majority of unmarried mothers live with the mothers' parents or with the mothers' parents and with others in the parental home (58.6 percent). Over the years, these mothers move out of the parental home either to set up a household with their husband and child (62 percent by the fourth interview) or to set up their own household with their child (10.3 percent to 24.6 percent over 10 years). A further reason for this increase in mother/child households is that some of the unmarried mothers married and then separated and/or divorced and may well have established a mother/child household as a consequence of these later events. Currently, only 6.2 percent of the unmarried mothers live with their parents or with their parents and other family members.

The married mothers had a high rate of living just with their husband and child at the beginning of the study (88.3 percent). Apart from these nuclear-family households, the married couples typically lived in the parental home (11.4 percent). The number of nuclear family households increased by 4.9 percent between the first and second interview as the married couples set up their own

FIGURE 3.6

Changes in Family Compostion over the Four Interviews



households. By the time of the third and fourth interviews, these numbers had begun to decline. Although households including the mother, husband, child and other people had increased slightly between the second and third interview the major change is found in the increase in mother/child and households most frequently resulting from separation and divorce. By the time of the fourth interview 7 percent of the married mothers lived in mother/child households.

Also by the time of the fourth interview, it was still apparent that the unmarried mothers had more variation in their family composition than the married mothers. There is less dispersion than at the beginning of the study, in that these mothers are now concentrated in two major family types, but they are still more

TABLE 3.2

Changes in Family Composition over the Four Interviews for Married & Unmarried Mothers

	Time1		Time2		Time3		Time4	
	Married	**Unmarried**	**Married**	**Unmarried**	**Married**	**Unmarried**	**Married**	**Unmarried**
M/C	0.0%	10.3%	0.0%	15.0%	0.7%	18.4%	7.0%	24.6%
M/C/H	88.3	20.2	93.2	29.9	91.1	33.8	87.8	62.1
M/C/H/O	11.4	10.9	5.8	7.5	7.8	8.5	4.7	7.1
M/C/P	0.3	26.9	0.6	21.1	0.0	15.4	0.3	3.8
M/C/P/O	0.0	31.7	0.3	26.5	0.3	23.9	0.3	2.4
n =	324	312	308	294	293	272	344	211
Cramer's V	0.74		0.68		0.64		0.32	
Significance of Chi-square	0.0001		0.0001		0.0001		0.0001	

M = Mother
C= Child (ren)
H = Husband
P = Parent (s)
O = Other (s)

likely to be living with parents and to have other members in the household, apart from a husband and child, than the married mothers. While the majority are living with their husbands and children, a quarter are single heads of households.

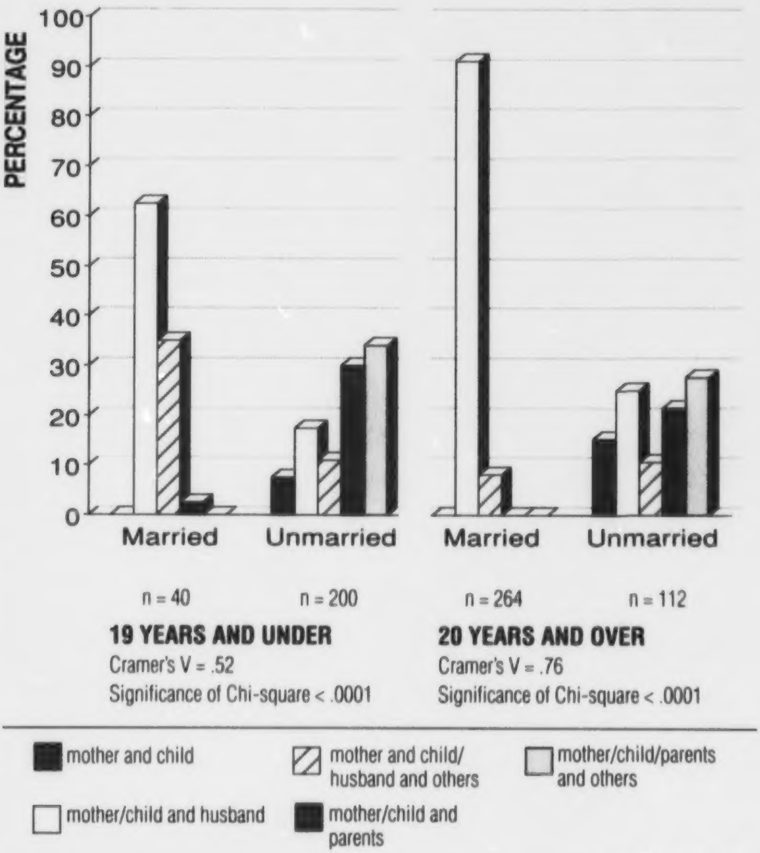
The married mothers' family composition changes far less than the unmarried mothers' over the years. While the family types of the married mothers was slightly less concentrated than at the beginning of the study, virtually all the change is explained by a decline in sharing the household with others and the increase in single-parent households. Although this last category has increased over the 10-year study period, the percentage of married mothers who are single parents is still less than a third of the unmarried mothers.

In looking at family composition over the 10-year period by both the original age and marital status of the mothers, the general trends discussed above can still be observed (see Figure 3.7).

At the time of the first interview the young mothers were more likely to be in households with their parents, unmarried mothers more so than married mothers. Older unmarried mothers, however, move out of such households more quickly after the birth of their

FIGURE 3.7

Family Composition by Mother's Original Age and Marital Status



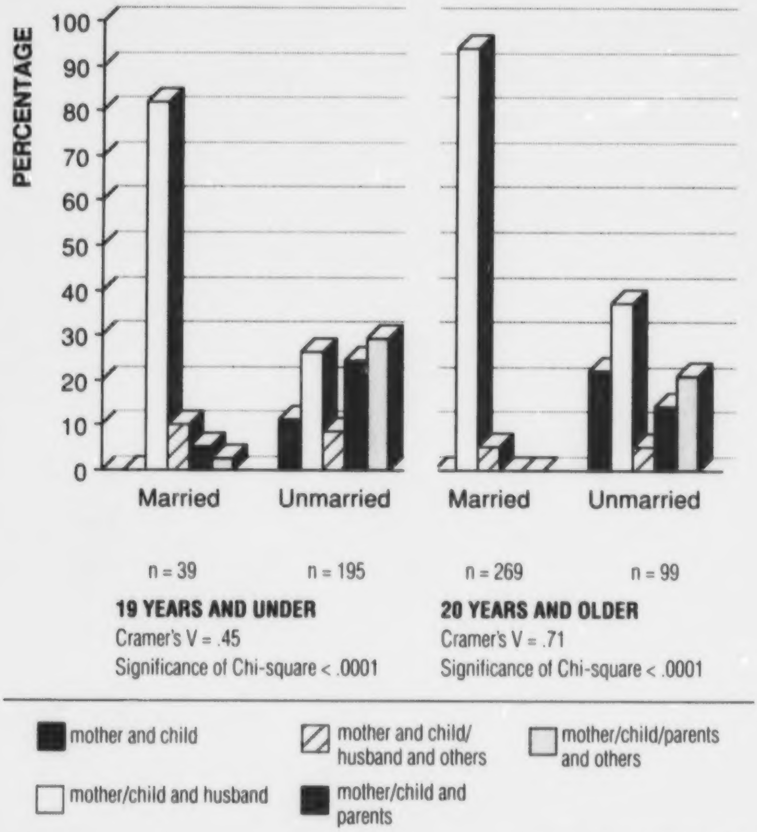
FIRST INTERVIEW

CONTINUED

first child than young unmarried mothers. This may not only indicate a greater capacity (financially and socially) to set up a household apart from parents, but may also indicate that it is seen as less appropriate for these older women to continue to live in the parental household. The figures also demonstrate the greater likelihood of mother/child households for the unmarried mothers,

Figure 3.7 continued

SECOND INTERVIEW



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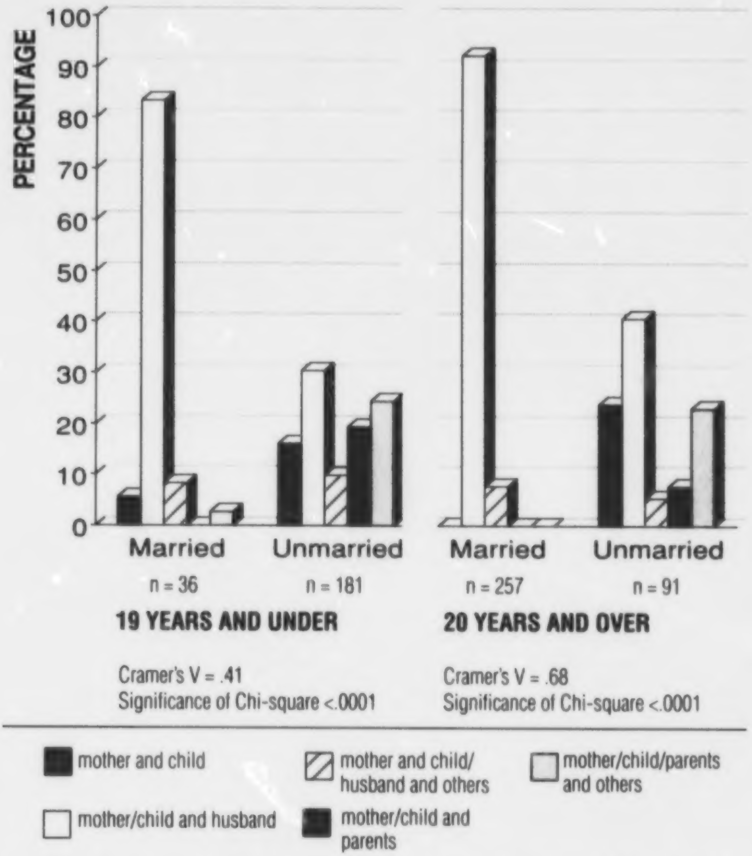
and that young married women are likely to set up this type of household sooner than the older married women, indicating an earlier dissolution of some of the marriages of the young mothers.

The findings reported in this Chapter are both reassuring and disquieting. They are reassuring in that the majority of the mothers have established their own families and households, and while marital difficulties do lead to separation and divorce, these occurrences are not out of line with the general Canadian experience.

Figure 3.7 continued

THIRD INTERVIEW



Cramer's V = .41
Significance of Chi-square <.0001

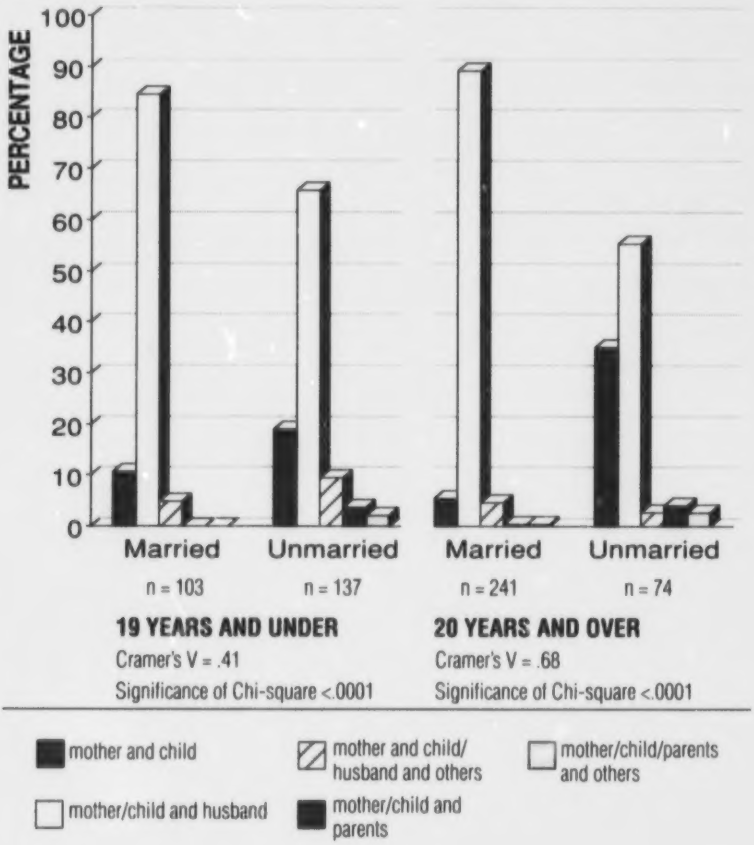
Cramer's V = .68
Significance of Chi-square <.0001

CONTINUED

Within this overall picture, however, there is evidence that some of the mothers have led more complex and difficult lives. While the older married women can be viewed as the most stable and traditional group, the young married women are likely to experience higher levels of marital instability and the unmarried mothers even more frequent changes in their family life. The young unmarried mothers would appear to experience fewer disadvantages with respect to marriage than the older unmarried women, which would suggest that the young women are better

Figure 3.7 continued

FOURTH INTERVIEW



Cramer's V = .41
Significance of Chi-square <.0001

Cramer's V = .68
Significance of Chi-square <.0001

able to adjust to a more regular life after the birth of their children. The older unmarried group appears to be quite distinctive in relation to marital and family issues and may be the most disadvantaged in that they have a lower rate of marriage and the highest rate of marital breakdown subsequent to marriage.

Footnotes

1. Eichler, Margrit. *Families in Canada Today*. Toronto: Gage Publishing Ltd., 1983.

2. Eichler refers to this as a "monolithic bias". She writes that this bias "expresses itself in a tendency to treat the family as a monolithic structure and in an emphasis on uniformity of experience and universality of structure and functions rather than on diversity of experiences, structures and functions". Eichler, M. 1983, pp. 1-2.

3. These changes are discussed in whole or in part in many publications.

   Romaniuc, A. *Fertility in Canada: From Baby-Boom to Baby Bust*, Statistics Canada, 1984. Catalogue number 91-524E.

   Dumas, J. *Report on the Demographic Situation in Canada, 1986*. Statistics Canada, 1987. Catalogue number 91-209E.

   Women in Canada: A Statistical Report. Statistics Canada, 1985. Catalogue number 89-503E.

   McKie, D.C., et al. *Divorce: Law and the Family in Canada*. Statistics Canada: Minister of Supply and Services, 1983. Catalogue number 89-502E.

4. Dumas, J. 1987, pp. 25-32.

5. Dumas, J. 1987, p. 20.

6. Kiernan, Kathleen E., and Sandra M. Eldridge. "Age at Marriage: Inter and Intra Cohort Variations". *The British Journal of Sociology*, 38(1), 1987, pp. 44-65.

7. Dumas, J. 1987, p. 25 and p. 29.

8. Burch, Thomas K. and Astrok K. Madan. *Union Formation and Dissolution: Results from the 1984 Family History Survey*. Statistics Canada, Minister of Supply and Services, 1986, pp. 9-11.

9. Romaniuc, A. 1984, p. 27.

10. Romaniuc, A. 1984, pp. 27-31.

11. Dumas reports that the number of marriages in which at least one spouse has been previously married increased from 12.3 percent in 1967 to 29.5 percent in 1985. See Dumas, J. 1987, p. 19.

12. Calculating the break-up rate of marriages is a complex process. Estimating the likelihood of people currently married experiencing a marital break-up and/or divorce requires projections which may eventually be disproved as the basis of the projections change. Hence, the probability of divorce is a best guess or an estimate and is subject to variation.

    Burch, T.K., and A.K. Madan. 1986, pp. 11-18.

McKie, D.C., et al. 1983, pp. 57-70.

13. McKie, D.C., et al. 1983, pp. 74-100.

    Ambert, Anne-Marie. *Divorce in Canada*. Academic Press Canada, 1980, pp. 50-111.

14. Bumpass, Larry L., and James A. Sweet. "Differentials in Marital Instability". *American Sociological Review*, 37(6), 1972, pp. 754-766.

    Weed, J.A. "Age at Marriage as a Factor in State Divorce Rate Differentials", *Demography*, 2(3), 1974, pp. 361-375.

    Palmer, Sally. "Divorcing Families: A Case Study in Southwestern Ontario", in K. Ishwaren (ed.), *The Canadian Family*. Toronto: Holt, Rinehart and Winston, 1976, pp. 614-630.

    McKie, D.C., et al. 1983, pp. 78-80.

    Wilt, David, et al. The Consequence of Early Marriage on Marital Dissolution, *Sociological Spectrum*, 7, 1987, pp. 191-207.

15. Palmer, S. 1976, pp. 617-169.

    South, Scott J., and Glenna Spitz. "Determinants of Divorce over the Marital Live Course", *American Sociological Review*, 31, 1986, pp. 583-590.

16. South, S., and G. Spitz. 1986.

    Wilt, David, 1987.

17. Morgan, S. Philip, and Ronald R. Rindfuss. "Marital Disruption: Structural and Temporal Dimensions", *American Journal of Sociology*, 90(5), 1985, pp. 1055-1077.

18. Palmer, S. 1976.

19. Morgan, S. and R. Rindfuss. 1985.

20. Morgan, S., and R. Rindfuss. 1985.

21. *Women in Canada*, 1985, Table 10, p.11.

22. Eichler, M. 1983, pp. 212-215, and *Women in Canada*, 1985, pp. 1-3.

23. Statistics Canada: *Canada's Lone-Parent Families*, Ministry of Supply and Services, 1984. Catalogue number 99-933.

24. Pool, Ian, and Maureen Moore. *Lone Parenthood: Characteristics and Determinants — Results from the 1984 Family History Survey*. Statistics Canada, Minister of Supply and Services, 1986.

25. Pool, I., and M. Moore. 1986, pp. 45-49.

26. The index of dispersion is calculated using the following formula:

$$N_c \ 1 - \frac{(1x-x1)/2}{x}$$

N_c refers to the number of times the respondent moved.

Gibbs, J., and D. Poston. "The Division of Labour: Conceptualization and Related Measure". *Social Forces*, 53(3), pp. 468-475.

4 HOUSING

Background Literature

One of the primary problems single mothers face is the difficulty of securing adequate housing.[1] Low incomes and discriminatory practices often force these women to live in unacceptable, substandard accommodations.[2] As a result of their dissatisfaction with such conditions, single mothers tend to move frequently; this instability, in turn, creates stress for both themselves and their children.[3]

Most of the research on housing follows a cross-sectional rather than a longitudinal design.[4] The existing studies concentrate almost exclusively on single mothers or compare single-parent and two-parent families at one point in time. Although such research provides interesting insights into conditions that may be encountered by unmarried mothers, it does not address the long-term consequences of bearing a child without being married. Only one study was found that specifically focused on this.[5] In that study, Filinson, a British researcher, examined the housing conditions of unmarried women who gave birth to their first child with similar married women.

This discussion of the literature on housing outlines identified differences between single- and two-parent families and concludes with a brief discussion of Filinson's unique study.[6] In general, unmarried mothers are more likely than married mothers to: live in urban apartments, spend a larger proportion of their income on housing-related expenses, share their accommodations with individuals outside the nuclear family, be dissatisfied with their housing and move frequently.

Like most Canadians, single mothers would prefer to own their own homes.[7] However, few women hold jobs that provide salaries sufficient to pay for and maintain a home by themselves.[8] In many cases single mothers have no independent means of support and must rely on government assistance.[9] Census data from 1981 revealed that only 20 percent of single-parent families, compared to 70 percent of two-parent families, were home owners.[10] Single parents were more likely to be renting apartments in large urban areas.[11]

Perhaps as an additional consequence of their poor financial situation, single mothers frequently shared their accommodations with family or friends. Canada Mortgage and Housing (CMHC) research has shown that young never-married mothers frequently reside with their parents.[12] But approximately 70 percent of all single-parent families, compared to 97 percent of Canadian families in general, live in autonomous nuclear family units.[13]

The amount single parents pay for housing is slightly lower than that paid by two-parent families; in Nova Scotia the average monthly mortgage and shelter costs for these two groups in 1981 were $342 and $387, respectively.[14] However, female single-parent families are by far the most likely to experience problems meeting their housing costs.[15] Approximately 63 percent of female single-parent families in the Atlantic Provinces, compared to only 18 percent of two-parent families, were spending more than 30 percent of their total household income on housing-related expenses in 1981.[16]

Single mothers also often express dissatisfaction with their living arrangements.[17] These mothers find it difficult to obtain suitable housing because of their low financial resources and the discriminatory practices of lessors against children and/or welfare recipients.[18] As a result of their restricted options, single mothers find themselves living in areas where they do not like their neighbours and feel isolated from any type of community support.[19]

All of the housing-related difficulties of single mothers culminate in a high degree of mobility.[20] Bosma-Donovan and Blouin pointed out that transiency was a way of life for the low income single mothers they interviewed in the Halifax area.[21] Likewise, CMHC identified never-married mothers as having particularly unstable housing profiles.

> These families most commonly reside in rental apartments or town houses which are often subsidized. In addition, a good number live as secondary families within their parent's home, at least during the initial stages of parenthood. Mobility rates are high and are a function of the high rate of transition, the often transitory nature of the position as secondary family and the transitory nature of housing opportunities available for very low income households.[22]

There is little controversy surrounding the premise that female single-parent families are residing in less desirable living accommodations than are two-parent families. However, the studies discussed previously focus exclusively on the current marital status of the mothers. The primary impetus for this research follows a slightly different line of investigation.

Beginning with two comparable samples of married and unmarried mothers, the objective was to follow these women into later life to ascertain if the effects of bearing a child without being married were short lived or had long-lasting repercussions. Only the Filinson study examined the subsequent effects of having a child without being married. The results of this study demonstrated that even many years after childbirth those women who were not married when their first child was born were still experiencing more housing problems than were their married counterparts.

Filinson compared the living conditions of families where the woman was not married when she first gave birth with those families where the woman was married, and confirmed the continued association of being unmarried at the time of the child's birth with poor housing conditions. Among single-parent families, 90 percent of those with a child conceived before marriage and 58 percent of those with a child conceived while married lived in a household with relatives other than a husband or child. Home ownership was non-existent for families in the first group while among families of the second group more than 10 percent owned their home.[23] Thus, it appears that the impact of single parenthood on housing is not confined to immediate circumstances, but can follow women throughout their lives.

It should be noted, however, that Filinson is writing about the British context. While it might be expected that a similar relationship between being an unmarried mother and having less desirable housing arrangements would occur in Canada, the context of the mothers in Canada is different. Canadians, and Nova Scotians in particular, have high rates of home ownership. Thus, in 1987, 62.4 percent of Canadians and 71.8 percent of Nova Scotians owned their own homes.[24]

Results

Although most of the literature reported in this chapter is Canadian based, there are still many unanswered questions. One CMHC researcher commented that at present a body of literature on housing and the single parent exists in Canada only by implication.[25] Even though many authors have implicitly or explicitly maintained that the housing conditions of single mothers are primarily a result of age and income differences, no multivariate analyses have been conducted to empirically ascertain the truth of these claims.[26]

The results presented in this chapter provide both descriptive information on the long-term housing situations of unmarried and married mothers and multivariate analyses of the factors that may account for differential living conditions. The discussion has been divided into five sections:

1. home ownership and family composition of married and unmarried mothers when their first child was born and 10 years later;
2. subjective assessments of the adequacy of housing obtained;
3. housing costs;
4. a comparison of the relative stability of residency patterns for married and unmarried mothers; and
5. an examination of the factors, other than marital status, that can influence housing conditions.

Family Composition and Home Ownership

As explained in the "Family" chapter, the general trends in family composition were related to the changing circumstances of the married and unmarried mothers. Immediately after the birth of the first child the majority of the unmarried mothers lived with the mothers' parents and with others in the parental home (58.6 percent). Over the years these mothers moved out of the parental home either to marry (62 percent were married by the fourth interview) or to set up their own household with their child (10.3 percent to 24.6 percent over 10 years). Another reason for this increase in mother/child households was that some of the unmarried mothers married and then separated and/or divorced and may well have established a mother/child household as a result. Currently, only 6.2 percent of the unmarried mothers live with their parents or with their parents and other family members.

The married mothers had a high rate of living with just their husband and child at the beginning of the study (88.3 percent). Apart from nuclear families the married couples lived in the parental home. The number of nuclear family households increased between the first and second interviews and then decreased slightly, with the most noticeable difference occurring at the time of the fourth interview, where 7 percent of the married mothers lived in mother/child households.

It was still apparent, at the time of the fourth interview that the unmarried mothers had more variation in their family composition than the married mothers. While there was less dispersion than at the beginning of the study in that these mothers were concentrated in two major family types, they were still somewhat more likely to be living with parents and to have other members in the household apart from a husband and child. While the majority were married, approximately 25 percent were single heads of households.

In contrast, the married mothers' family composition changed far less. While the family types were slightly less concentrated than at the beginning of the study, virtually all the change was attributable to a decline in sharing the immediate family with others and an increase in single-parent households. While this latter category increased over the 10 years, the percentage of married mothers who are single parents was still less than a third of the unmarried mothers.

In examining family composition by both original age and marital status, young mothers were more likely to be residing in parental households, especially the unmarried mothers, at the time of the first interview. Older unmarried mothers, however, moved out of these households sooner after the birth of the child than the younger unmarried mothers.

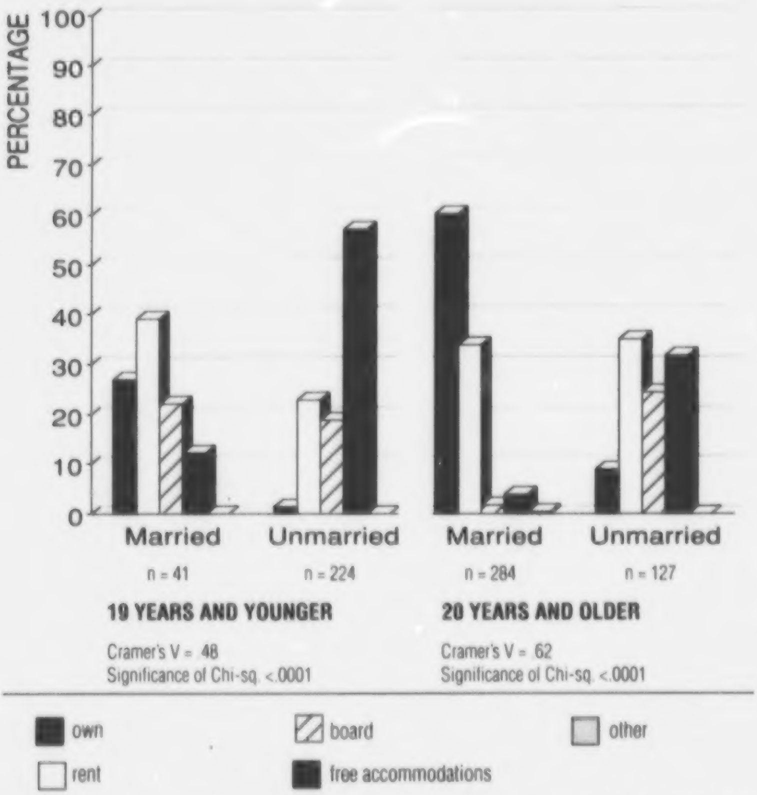
As mentioned earlier, 71.8 percent of Nova Scotians owned their own homes in 1987.[27] Although approximately half of the married mothers owned their own home when their first child was born (56 percent), only four percent of the unmarried mothers were home owners. A large number of the unmarried mothers (48 percent), compared to only 5 percent of the married mothers, were living at no cost with their parents. Forty-eight percent of the unmarried mothers, compared to 39 percent of the married mothers, were boarding or renting.[28] Although a few of the young married mothers were able to purchase a house before starting their family, the older married mothers were by far the most likely to be home owners. Personal ownership was virtually non-existent for both teenage and older unmarried mothers (see Figure 4.1).

Most of the married mothers who had not been in a position to purchase a home prior to having their first child managed to do so in the next 10 years. And even though home ownership increased among the unmarried mothers from virtual non-existence to 47 percent, this figure could not compare to the 86 percent home ownership figure for the married mothers. Fifty-one percent of the unmarried mothers, compared to only 12 percent of the married mothers, were renting or boarding when their first child was 10 years old. Only 2 percent of either the married or the unmarried mothers continued to live with family at no cost or have some other type of payment arrangement.[29] Although housing conditions could be considered to have improved for all groups, the older married mothers continued to exhibit the highest incidence of home ownership (see Figure 4.1).

Figure 4.1

Types of Tenancy Arrangements for Mothers by Original Age and Marital Status

FIRST INTERVIEW: 3 TO 6 WEEKS AFTER CHILDBIRTH



Cramer's V = .48
Significance of Chi-sq. <.0001

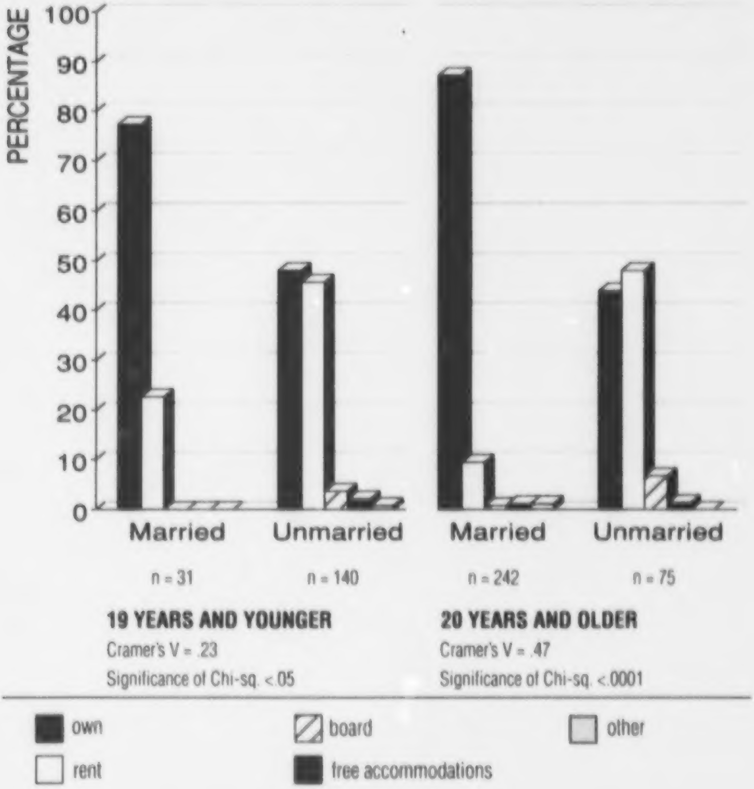
Cramer's V = .62
Significance of Chi-sq. <.0001

CONTINUED

When considering the types of dwellings in which these women lived, the majority of both married (59 percent) and unmarried (61 percent) respondents were living in private

Figure 4.1 continued

FOURTH INTERVIEW: 10 YEARS AFTER CHILDBIRTH



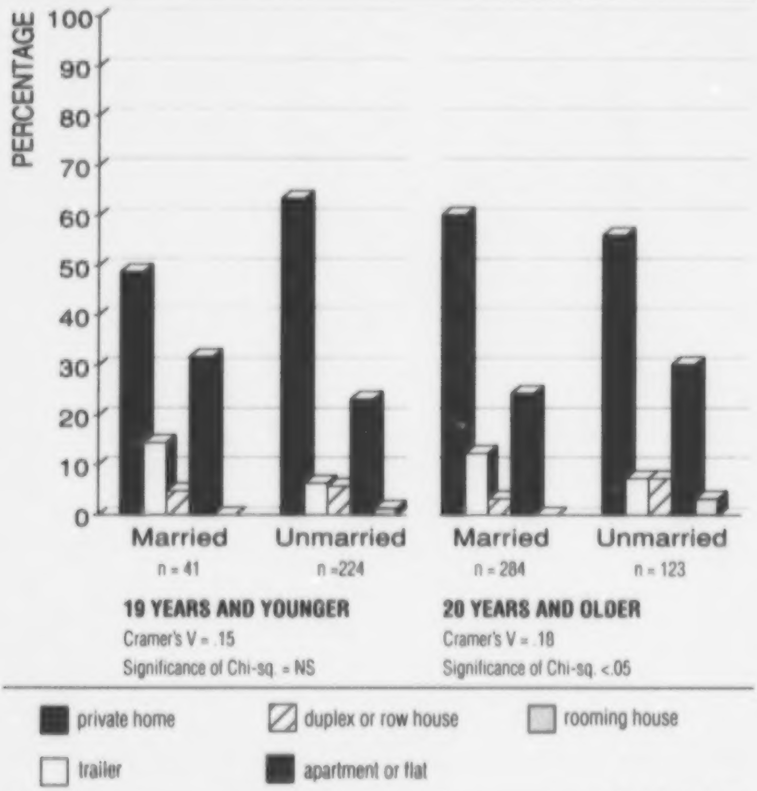
detached houses when their first child was born.[30] While this figure increased to 85 percent for the married mothers as more and more purchased their own homes, it decreased slightly, to 57 percent, for the unmarried mothers as they moved out of the private homes of their parents.[31] Figure 4.2 shows that, 10 years after childbirth, the older married mothers were the most likely to be residing in private homes, whereas, the older unmarried mothers were the most likely to be living in apartments.

At first glance, there are many possible advantages of single mothers living with their parents. This arrangement can provide

FIGURE 4.2

Types of Housing for Mothers by Original Age and Marital Status

FIRST INTERVIEW: 3 TO 6 WEEKS AFTER CHILDBIRTH

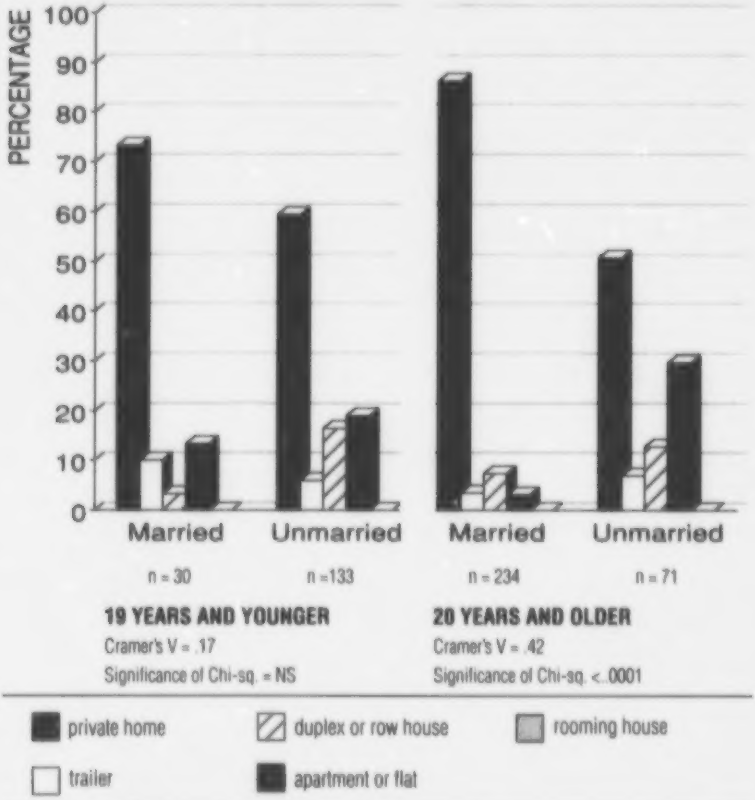


CONTINUED

security while facilitating educational and employment pursuits. However, such extended family households often have insufficient space to adequately accommodate parents, children and grandchildren. Statistics Canada defines "overcrowding" as more than one person per room in the dwelling.[32] Using this definition, 42 percent of the unmarried mothers, compared to only 6 percent of the married mothers, experienced overcrowding when their first child was an infant (Phi = .42,

Figure 4.2 continued

FOURTH INVERVIEW: 10 YEARS AFTER CHILDBIRTH



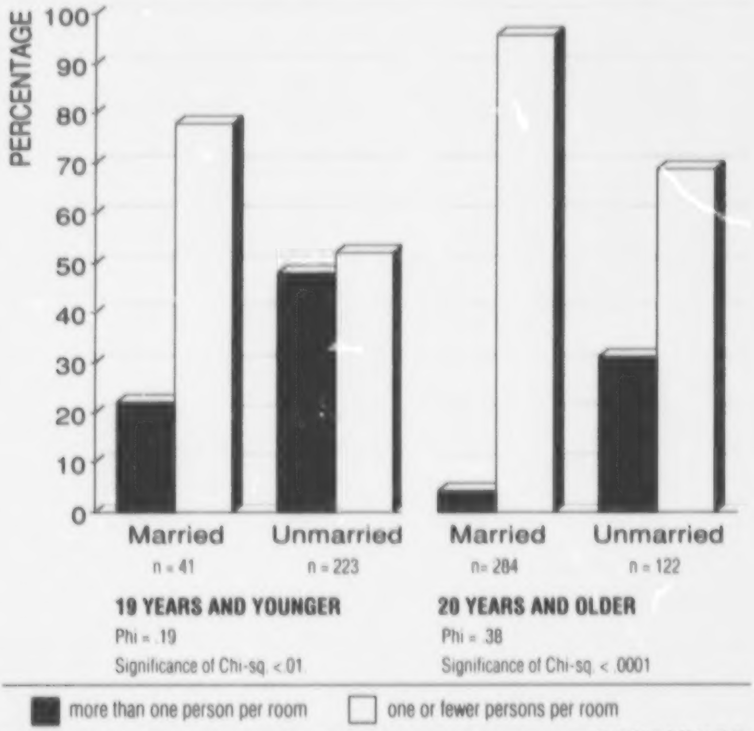
Significance of Chi-square < .0001, n = 670).[33] Figure 4.3 shows that overcrowding was most prevalent among the young unmarried mothers and virtually non-existent among the older married mothers.

Fortunately, housing conditions improved. By the time their children reached 10 years of age, only 7 percent of the unmarried mothers and 1 percent of the married mothers were experiencing overcrowding (Phi = .15, Significance of Chi-square < .01, n = 488). The young unmarried mothers were still the most likely to be residing in accommodations with more than one person per room, although the number was not large (see Figure 4.3).[34]

FIGURE 4.3

Percentage of Mothers Experiencing Overcrowding in Their Living Arrangements by Original Age and Marital Status

FIRST INTERVIEW: 3 TO 6 WEEKS AFTER CHILDBIRTH

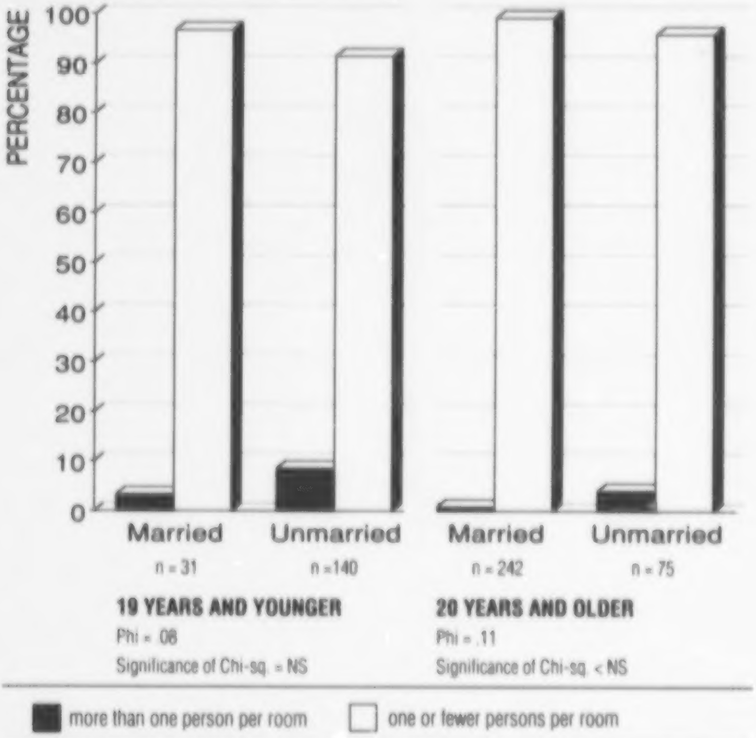


CONTINUED

In summarizing the results on home ownership, it can be seen that most of the married mothers owned their own homes before conceiving their first child. Although the housing situations of the unmarried mothers improved over time in terms of personal space and privacy, the married mothers continued to have more desirable accommodations. Ten years after becoming a mother, the vast majority of the married respondents,

Figure 4.3 continued

FOURTH INTERVIEW: 10 YEARS AFTER CHILDBIRTH



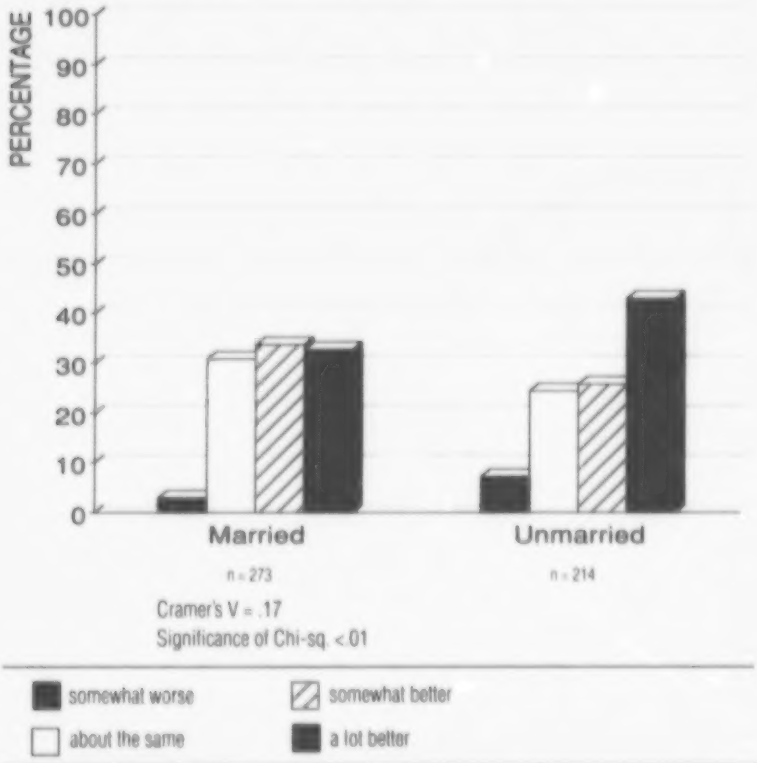
compared to only half of the unmarried respondents, were owners rather than renters.

Satisfaction with Housing

When respondents were asked to assess their housing, the majority of both the married (68 percent) and unmarried (66 percent) mothers believed that their situation had improved over the 10-year study period. Forty-three percent of the unmarried mothers and 33 percent of the married mothers said their housing was "a lot better" by the time their first child reached 10 years of age than it had been when their child was born (see Figure 4.4).

FIGURE 4.4

Changes in Satisfaction With Housing Over the First Ten Years After Childbirth for Mothers by Original Marital Status



Cramer's V = .17
Significance of Chi-sq. < .01

However, as might be expected from the preceding discussion, the unmarried mothers were still less satisfied with their housing than the married mothers. The questionnaire administered 10 years after childbirth included three questions to ascertain subjective assessments of living accommodations. One question referred to the respondent's perception of the adequacy of her housing over the entire 10-year period; the other two concentrated on satisfaction with her current residence. These three items were combined to form an index of the respondent's subjective assessment of the adequacy of her accommodations.[35] The values of this scale ranged from 3 to 15, with 3 reflecting a very dissatisfied response to all three questions and 15 reflecting a very satisfied response. Using this index, the unmarried mothers had a mean satisfaction score of 12.6 compared to a mean satisfaction score of 13.7 for the married mothers ($t = 5.21$, $p < .0001$, $n = 488$). Judging from these numbers, the majority of both the married and unmarried mothers were satisfied with their housing, however, the unmarried mothers slightly less so than the married mothers.

Those few respondents (10 percent) who expressed dissatisfaction with their accommodations had strong complaints. The most frequently-mentioned problem areas were small size and unsatisfactory neighbourhoods. Mothers sometimes mentioned that they felt ostracized or that the area they were living in was an unhealthy environment for raising children.

Other, slightly less prevalent housing problems were: lack of basic amenities, lack of control over heating, dissatisfaction with lessors, rundown conditions and inconvenient locations.

When those respondents who were unable to find acceptable housing were asked what difficulties they experienced, the most frequent response was "a lack of money". The discriminatory practices of lessors against children and/or welfare recipients, and the lack of suitable premises were also obstacles.[36]

Although the majority of both the married and unmarried mothers in this study had been able to obtain satisfactory housing by the time their first child reached 10 years of age, the unmarried mothers were, on average, still slightly less satisfied with their accommodations. It should also be noted that the 10 percent who continued to express dissatisfaction with their housing arrangements had quite severe problems.

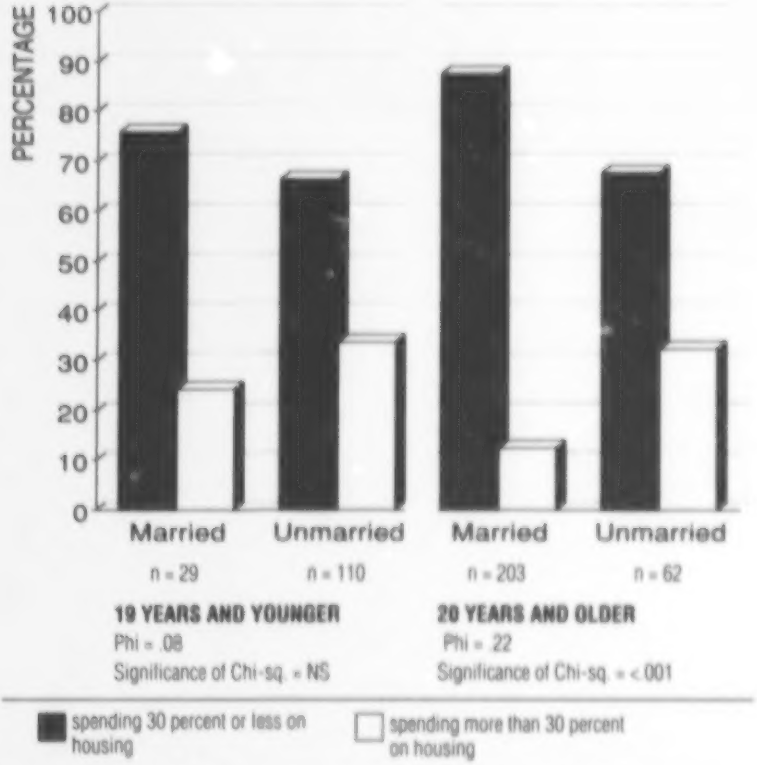
Cost of Housing

Cost is obviously one of the foremost considerations and restraints with respect to housing. Ten years after childbirth, married and unmarried mothers were paying, on average, approximately the same amount per month in rent and mortgages, \$338.26 and \$302.83, respectively ($t = 1.54$, $p = NS$, $n = 486$).[37] However, this expenditure represented a significantly larger proportion of the total household income for the unmarried than for the married group. On average, the unmarried mothers were spending approximately 20 percent of their total household income on mortgage or rent, whereas this figure was only 13 percent for the married group ($t = -5.90$, $p < .0001$, $n = 479$) (see Figure 4.5).

A generally-accepted guideline for financial security is that shelter costs should not exceed 30 percent of household

FIGURE 4.5

Amount of Income Spent on Housing by Mother's Original Age and Marital Status



income.[38] When rent or mortgage payments were combined with heating and electrical costs, 33 percent of the unmarried mothers and 14 percent of the married mothers exceeded reasonable housing expenses relative to their financial resources (Phi = .23, Significance of Chi-square < .0001, n = 404). Given that the older married mothers tended to have the highest household incomes, it is not surprising that they were the least likely to be spending a disproportionately large amount of their income on housing.

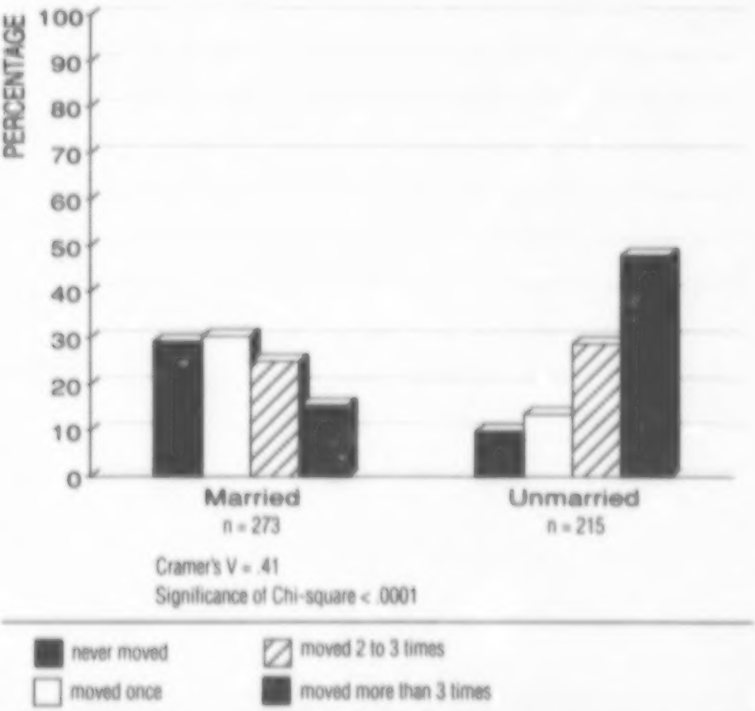
Stability of Living Arrangements

As pointed out in the literature review, low incomes, unsuitable living arrangements and changing relationships come together to promote a high degree of mobility among unmarried mothers. As outlined in the chapter on family structure, the mothers who were single when their first child was born usually married while some moved back and forth between married and common-law relationships.

Twenty-nine percent of the married mothers, compared to only 10 percent of the unmarried mothers, remained at the same location throughout the entire first 10 years of their child's life. Furthermore, 48 percent of the unmarried, and only 15 percent of the married, respondents moved more than three times (see Figure 4.6).

FIGURE 4.6

Number of Moves for Mothers by Original Marital Status

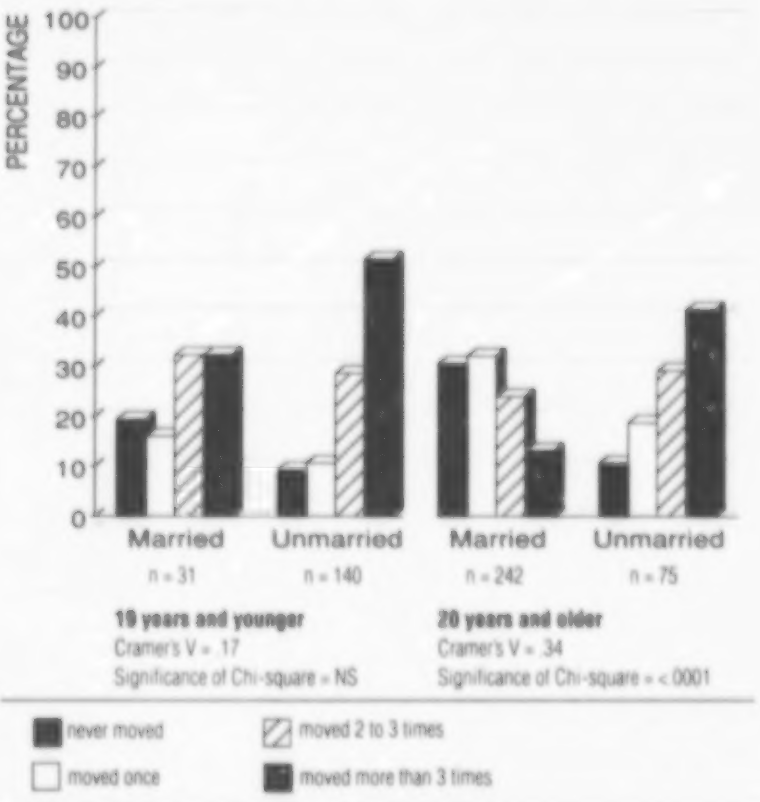


Cramer's V = .41
Significance of Chi-square < .0001

Over the 10-year study period, the unmarried mothers moved an average of 3.7 times, which was much higher than the average of 1.7 times for the married mothers ($t = 8.79$, $p < .001$, $n = 488$). In addition, mobility was lowest for the older married mothers (see Figure 4.7). The relatively favourable financial situations of the older married mothers enabled them to purchase a home before starting a family, and low divorce rates meant they were usually not forced to leave their original place of residence.

FIGURE 4.7

Number of Moves for Mothers by Original Age and Marital Status



Frequent changes in living arrangements can create stress and adjustment problems for both mothers and their children. Community bonds and friendships are often broken when families follow transitory patterns. Although the number of times a mother has moved gives some indication of the stability of the environment she has been able to provide for herself and her family, there is a second dimension to the concept of stability, and that is the duration of stay at each residence. For example, two mothers moved five times. However, the first mother lived in each of her first four residences only three months, then lived in the fourth place nine years. The second mother spent two years at each of her five residences. Even though these two women moved an equal number of times, the overall stability of their home lives was quite different. The second mother's scenario would be more disruptive because no long-term bonds or adjustment could occur.

An index of dispersion can be calculated to simultaneously monitor both these dimensions of stability: the number of moves and the duration of stay at each residence. This index would equal 1 if the mother remained in the same location for the full 10-year period. At the other end of the spectrum, mothers who moved frequently and spent approximately equal periods of time at each place of residence would have high index scores.

The married mothers clearly enjoyed more stable housing, with an average index score of only 1.8, compared to 3.2 for the unmarried mothers ($t = -8.74$, $p < .0001$, $n = 431$). The young unmarried mothers exhibited the most transitory life styles with a mean dispersion index score of 3.4, which was higher than 2.7 for the older unmarried, 2.4 for the young married and 1.7 for the older married women.

Other Factors that May Influence Housing Conditions

Having described the general housing patterns of married and unmarried mothers and examined differences among age groups, this concluding section focuses on the significance of original marital status, income levels, reliance on social assistance and age in determining the housing conditions of mothers 10 years after childbirth. Two separate housing indicators are analyzed. The satisfaction index provides a measure of each mother's personal perception of her accommodations, while the number of rooms in the household provides a more objective indication of the size and value of her accommodations.[39]

Table 4.1 lists the first order correlations between each of the independent variables and the two dependent variables.

TABLE 4.1

Pearson Product-moment Correlation Coefficients of Various Factors with Housing Satisfaction and Number of Rooms in the Household, Ten Years After Childbirth

	Housing Satisfaction		Number of Rooms	
	r	n	r	n
marital status at the time of childbirth	-.24[a]	488	.35[b]	488
total household income	.23[c]	474	.36[d]	474
age of mother	.21[e]	488	.27[f]	488
current welfare status of mother	-.36[g]	486	-.28[h]	486

a to h $p < .0001$

In addition, regression procedures were used to provide an understanding of the relative importance of the independent variables in accounting for housing conditions (see Table 4.2). The primary determinant of satisfaction with housing was whether the individual was receiving social assistance. Upon first consideration, one might hypothesize that social assistance recipients would be less satisfied with their housing because their low incomes would prevent them from obtaining suitable accommodations. However, total household income was inconsequential in explaining satisfaction levels once other factors were considered. This signifies that two mothers could have the same amount of household income but the mother who was receiving her income from social assistance would be more likely to be dissatisfied with her housing.

Some possible explanations for this finding can be derived from the reasons mothers express dissatisfaction with their housing and the obstacles that deter them from obtaining more suitable accommodations. Social assistance recipients often have restricted choices in terms of securing rental facilities. Lessors tend to give preference to independent individuals or families because they have negative perceptions about the ability of

TABLE 4.2

Multiple Regressions for Housing Satisfaction and Number of Rooms in the Household, Ten Years After Childbirth

	Housing Satisfaction	Number of Rooms
	Beta	Beta
marital status at the time of childbirth	-.08	-.19[a]
total household income	.07	.24[b]
age of mother	.09	.06
current welfare status of mother	-.30[c]	-.14[d]
Multiple R =	.40	.46
	n =474	

a. p<.001; b. p<.0001; c. p<.0001; d. p<.01

social assistance recipients to pay for and maintain their units. Thus, even with equal financial resources, these women can experience more difficulties in securing rental facilities. The second option — public housing — is usually seen as preferable to the private market because larger dwellings can be obtained. However, these accommodations can have other undesirable attributes in terms of community standards.[40]

In contrast to satisfaction measures, total household income is the most significant predictor of the number of rooms in the dwelling. Those mothers who had higher household incomes also had larger homes. However, mothers who were not married when their first child was born continued to be living in smaller accommodations irrespective of their household income. Although income is an important consideration in the area of housing it does not totally dismiss the effect of original marital status.

Two statements can be made as a summation of this chapter. First, comparisons of data collected immediately after childbirth and 10 years later demonstrated that the housing conditions of both married and unmarried mothers improved over time. Second, those mothers who were married when their first child was born and began parenthood while owning their own homes, had better housing in the long run. In contrast, most unmarried mothers started out in overcrowded parental homes and moved many times over the research period. Unmarried mothers also spent a considerably higher proportion of their total household income for accommodations and more than twice as many unmarried mothers as married mothers exceeded reasonable housing expenses relative to their financial resources. These factors strongly suggest the need for increased financial assistance for unmarried mothers.

Footnotes

1. Statistics Canada: Census Operations Division. *Canada's Lone-Parent Families*. Supply and Services Canada, May 1984, p. 20.

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   Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*. Canadian Mortgage and Housing Corporation, March 1983, p. 1.

   Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose*. Canadian Mortgage and Housing Corporation, pp. i-1.

2. Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*. March 1983, pp. 5 and 10.

   Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose*. pp. i-7.

3. Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*. March 1983, pp. 43 and 53.

   Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose*. pp. 3-9.

4. MacKay, H., and C. Austin. June 1983.

   Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*. March 1983.

   Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose*

5. Filinson, R. "Illegitimate Birth and Deprivation: Recent Findings from an Exploratory Study". *Social Science and Medicine*, 20(4), 1985, p. 311.

6. Filinson, R. 1985, pp. 307-314.

7. Statistics Canada: Census Operations Division. *Canada's Young Family Home-Owners*. Supply and Services Canada, February 1984, p. 1.

8. Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*, March 1983, p. 35.

9. Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose.*

10. Statistics Canada, February 1984, p. 4.

11. Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*, March 1983, p. 3.

12. Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*, March 1983, p. 52.

    Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose*, pp. i-34.

13. Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*, March 1983, p. 43.

14. Statistics Canada, February 1984, p. 8.

15. Statistics Canada, February 1984, p. 12.

    Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*, March 1983, p. 6.

    Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose*, pp. i-1.

16. Statistics Canada, February 1984, p. 13.

17. Bosma-Donovan, E., and B. Blouin. *A Roof Over Our Heads: Single Mothers in Housing Crisis in the Halifax Metro Area.* Halifax: The Network for Supportive Services for Women, September 1988.

18. Bosma-Donovan, E., and B. Blouin. September 1988, p. iii.

    Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*, March 1983, pp. 5 and 10.

    Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose*, pp. i-7.

19. Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*, March 1983, p. 10.

20. Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*, March 1983, pp. 43 and 53.

    Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose*, pp. 3-9.

21. Bosma-Donovan, E., and B. Blouin. September 1988, p. iii.

22. Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose*, p. 3-9.

23. Filinson, R. 1985, pp. 311-312.

24. Statistics Canada: *Profiles, Nova Scotia: Part I*. Supply and Services, Canada, September 1987, p.3.

25. Klodawsky, F., et al. *The Housing Needs of Single Parent Families in Canada*, March 1983, p. 24.

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    Klodawsky, F., et al. *Single Parent Families and Canadian Housing Policies: How Mothers Lose*, pp. i-32.

27. Statistics Canada: *Profiles, Nova Scotia: Part I*. Supply and Services Canada, September 1987, p. 3.

28. Using the categories shown in Figure 4.2, there was a very strong association between marital status and type of housing expenditure immediately after childbirth (Cramer's V = .0001, Significance of Chi-square < .0001, n = 672).

29. Ten years after childbirth, there was still a strong association between marital status and type of housing expenditure (Cramer's V = .44, Significance of Chi-square < .0001, n = 488).

30. Of those married mothers who did not live in a private house 13 percent lived in a trailer, 3 percent lived in a duplex or row house and 25 percent lived in an apartment. For the unmarried mothers who did not live in a private house, 7 percent lived in a trailer, 5 percent lived in a duplex or row house, 25 percent lived in an apartment and 2 percent lived in a rooming house. Thus, there was only a weak association between marital status and housing type shortly after childbirth (Cramer's V = .14, Significance of Chi-square < .01, n = 672).

31. Ten years after childbirth, there was a significant association between marital status and housing type (Cramer's V = .33, Significance of Chi-square < .0001, n = 468). Of those married mothers who did not live in a private home, 4 percent lived in a trailer, 7 percent lived in a duplex or row house, and 4 percent lived in an apartment. For the unmarried mothers who did not live in a private home, 6 percent lived in a trailer, 15 percent lived in a duplex or row house, and 22 percent lived in an apartment.

32. Statistics Canada, February 1984, p. 7.

33. MacDonnell S. 1981, pp. 128-129.

In the earlier book for this research, Susan MacDonnell included 1 person per room in the overcrowded category. When this broader definition was applied, there were substantially more respondents living in overcrowded conditions shortly after childbirth: 23 percent of the married mothers and 66 percent of the unmarried mothers (n = 670).

The mean number of rooms per person living in the household shortly after childbirth was 1.6 for the married group and 1.0 for the unmarried group (t = 14.17, p < .0001, n = 670).

34. The mean number of rooms per person living in the household when the child reached ten years of age was 1.7 for the married group and 1.5 for the unmarried group (t = 2.46, p < .01, n = 488).

35. The standardized Cronbach's alpha for this index was 0.69.

36. Only 43, or 9 percent, of the respondents said there had been times when they had not been able to find an acceptable place to live.

37. Both of these figures might be considered artificially low, but for different reasons. A number of the mothers in the married group had finished paying their mortgages and, therefore, had no monthly payments. Some of the unmarried mothers had subsidized housing which kept their rent payments below market value.

38. Statistics Canada, February 1984, p. 9.

39. Ten years after childbirth, the mean number of rooms in the household was 6.9 for the married mothers and 5.7 for the unmarried mothers (t = 8.23, p < .0001, n = 488).

40. The discussion of satisfaction levels should be interpreted with some caution as the dependent variable was clearly skewed toward the higher end of the scale.

5 EDUCATIONAL ATTAINMENT

Background Literature

Education has often been considered an essential component to success in Canadian society by leading to greater employment opportunities, increased earnings and career advancement. During the past 20 years women have made dramatic strides in improving their educational qualifications. In 1971, 32 percent of all women 15 years of age and over had less than a Grade 9 education. By 1983 this figure had dropped to 20 percent as more women obtained higher educational qualifications. During this same period the number of women who attended or completed high school remained relatively constant at 51 percent, on average approximately four percent higher than men.[1]

At the university level the number of women attending has increased at a faster rate than for men, thereby narrowing the educational attainment gap. Between 1970-71 and 1982-83 total university enrolment of women in Canada more than doubled from 173,000 to over 350,000. Although women continue to increase their educational qualifications, they still tend to be concentrated in traditional fields of study and are far more likely to be part-time students. Almost half (45 percent) of the women attending undergraduate university programs were enroled part time during 1982-83 compared to 31 percent for men.[2]

In addition, the level of educational attainment has had a substantial impact on the labour force activity of women. Women who have obtained university or college degrees are far more likely to be in the labour force and their chances of being unemployed are much lower. In 1983 Canadian women with a university degree were three times more likely to be in the labour force (76 percent) than women with elementary school education (21 percent). Educational attainment has also influenced the level of income for women. In 1982 women with less than high school earned on average $20,073 compared to $36,266 for women with a university degree.[3]

Additional studies have identified education as a primary determinant of marital stability, parenting skills and psychological well-being among adolescent mothers.[4] Howell and Frese indicated that "The single most evident result of early role transition, especially parenting, is the depressing effect on subsequent schooling; childbearing being a major factor in the termination of formal education among young females".[5] If a woman becomes pregnant in her teens she is unlikely to ever complete high school and without this basic level of education she has little chance of securing employment that will raise her above the poverty line.[6] Many factors converge to make it difficult for young mothers to return to school, including the lack of affordable, accessible day care, financial restraints and competing role obligations.[7]

An early transition to parenthood can create severe dilemmas for teenage mothers because they are caught between two often conflicting sets of values.[8] On the one hand, dominant societal norms stress the importance of formal education, however, at least equal emphasis is placed on familial responsibility.[9] Parents are expected to provide for the physical, emotional and financial needs of their children. Can the teenage mother continue to attend classes and still fulfil her other roles as mother, wife and/or employee? Although this is a difficult question, the severe repercussions of early departure from the school system make it imperative that researchers examine the factors that promote or hamper the continuation of educational pursuits after childbirth. Within the existing literature, it has been suggested that the probability of young mothers returning to school may depend on a variety of individual, social and economic factors.

On an individual level, discussions have focused on the significance of academic aptitude, motivation and choice in determining whether young women will continue their education after childbirth. Although aptitude and motivation have been positively correlated with educational attainment, there is disagreement whether motivation alone can override the negative effect of early childbearing.[10] In most instances, the continued disadvantaged position of teenage mothers is not simply a consequence of personal characteristics. Likewise, motivation is not always a sufficient prerequisite for educational achievement. Hogan found that the majority of teenage mothers wished to continue their education but felt restricted by the lack of social and economic support.[11]

Among teenage mothers choice is one factor that has shown a consistent association with educational attainment. Although by no means conclusive, there have been indications that those adolescents who choose to become mothers are the most likely to terminate their education.[12] This particular consideration may also be related to the mother's marital status. Early marriage has been repeatedly cited as a deterrent to educational attainment.[13]

If women marry and choose to start a family at an early age, they are unlikely to complete high school or obtain any technical, vocational or university training.

In most instances, socio-economic differences have been shown to override individual attributes of young mothers in predicting educational success in later life. It is not so much the will or ability of the teenage mother but the socio-economic status (SES) of her family that influences her educational pursuits.[14] Families of high SES have access to more financial and educational resources to assist with their children's academic or vocational endeavours.[15]

Teenage mothers whose parents cannot provide financial support usually rely on some form of social assistance for at least the first few months after childbirth.[16] There are opposing views on the effect of this on subsequent educational and employment pursuits. It has been argued that receiving social assistance encourages dependence on the system and discourages personal initiative for self-improvement.[17] Others maintain that government support is the only means by which poor mothers can be released from the need to obtain low-paying employment that leaves them with no time for training.[18] Empirically there is no evidence that receiving social assistance has either a positive or a negative impact on the educational accomplishments of adolescent mothers.[19]

While financial help is important, the teenage mother also requires a great deal of intangible support for both herself and her child. As mentioned previously, the early transition to motherhood creates a great deal of emotional and social stress. If young women are to successfully surmount the obstacles posed by parenthood they need counselling and child care assistance which, once again, usually comes from government-funded programs or their immediate families. Currently, a number of agencies and organizations are calling for policies designed to encourage teenage mothers to reside with their parents.[20]

This discussion of the conditions that promote educational upgrading should not be construed as an indication that women who have children early in life will never catch up with those who postpone pregnancy. But on one issue there is little dispute. In general, women who assume the role of motherhood during their teens are much less likely than their classmates to complete high school and undertake post-secondary studies.[21]

Results

The results presented in this chapter cover many facets of the educational paths followed by married, unmarried, teenage and older mothers. Particular consideration is given to educational attainment at the time of childbirth, subsequent educational pursuits, and the determinants of educational endeavours after childbirth.

Any repercussions of teenage childbearing on education would be evident in the present research because 265 (39 percent) of the respondents gave birth to their first child before they reached 20 years of age. Although the vast majority of the teenage mothers are concentrated in the unmarried group (n = 224), it is important not to lose sight of the young married mother (n = 41) who may be struggling with her new role as wife while juggling the competing demands of school and motherhood.

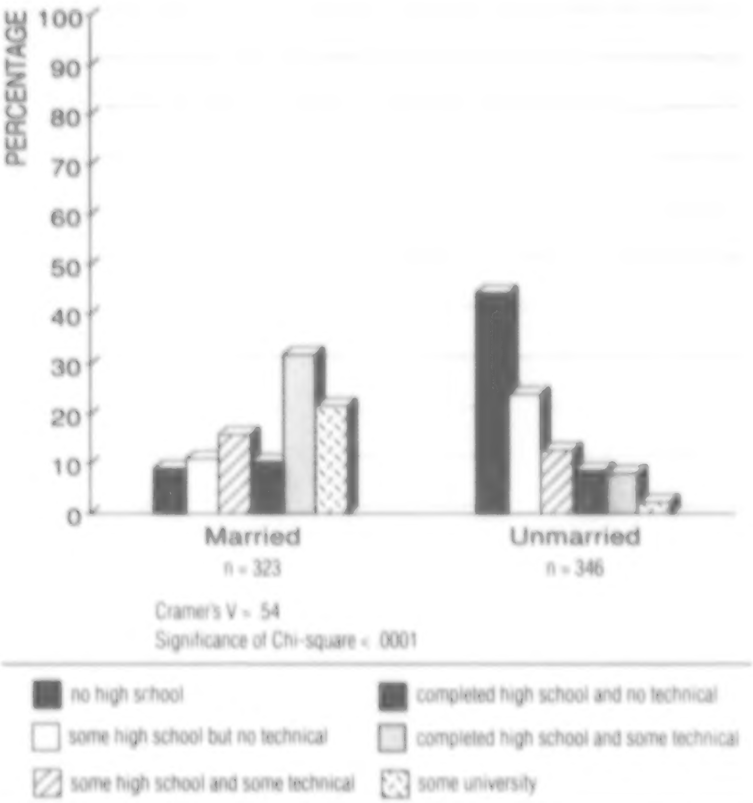
Educational Attainment at Birth of the First Child

Given the distinct differences in age distribution, it is not surprising that the unmarried mothers reported lower educational qualifications at the time their first child was born (see Figure 5.1).

When this study began in 1978 the married mothers were relatively well educated, with 64 percent holding a high school diploma. The figures for unmarried mothers were much lower — only 19 percent had completed Grade 12 prior to giving birth.[22] The Statistics Canada publication, *Women in Canada*, noted that in 1976 approximately 35 percent of Canadian women ages 25 to 34 had completed Grade 12 and gone on to some type of post-secondary training.[23] Similarly, 31 percent of the respondents for this project indicated they had completed high school and had participated in some type of post-secondary training. Once again, the distribution was clearly skewed in favour of the married group, with 54 percent of the married mothers, compared to only 10 percent of the unmarried mothers, indicating they had completed high school and continued to pursue some type of technical, vocational or university training (see Figure 5.1). In terms of specific employment-related skills, 65 percent of the married mothers, compared to only 19 percent of the unmarried mothers, reported that they were qualified to practice a trade or profession (Phi = .46, Significance of Chi-square < .0001, n = 672).

FIGURE 5.1

Education Attainment at the Time of Childbirth by Marital Status



Cramer's V = .54
Significance of Chi-square < .0001

It is tempting to use age to explain away the effect of marital status and conclude that the only reason unmarried mothers exhibited significantly lower levels of educational attainment was because they were more likely to have become pregnant during their teens. However, the association between original marital status and Grade 12 completion persisted even when age was taken into account. Only 11 percent of the unmarried teenage mothers, compared to 24 percent of the married teenage mothers, had completed Grade 12 before having their first child. Even among the older respondents who had clearly passed school age, the percentage of unmarried mothers who had completed Grade 12 was half that of the married group, 34 percent and 70 percent, respectively.[24] Thus, the generally lower educational attainment among unmarried mothers was not solely a function of the higher proportion of teenagers in this group.

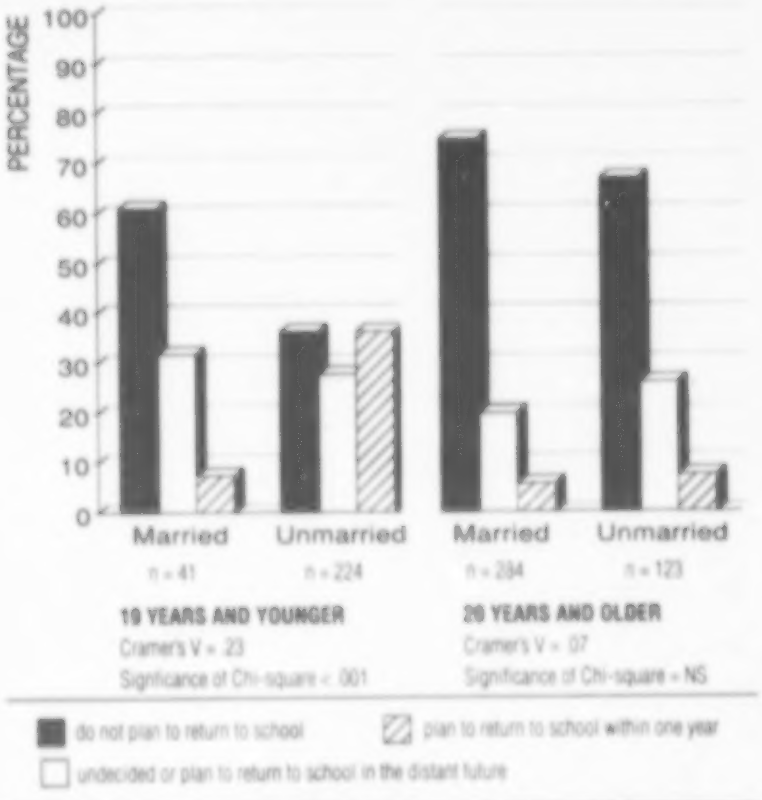
The unmarried teenage mothers were the most likely to have had their education interrupted by the birth of their first child; 55 percent of this group were attending school or some type of training course when they became pregnant. Only 27 percent of the married teenage mothers, 5 percent of the older married mothers and 6 percent of the older unmarried mothers were attending any type of educational institution at the time of conception. The majority of young married mothers had already dropped out of the school system by the time they conceived their first child. Most of the older respondents had also ceased their education before becoming pregnant, even though many of the unmarried women had not completed Grade 12.

The older mothers in both the married and unmarried groups were not only unlikely to have been attending school or a training program at the time of conception, they were also unlikely to be planning to further their education after their child was born. Similarly, few of the married teenage mothers had resumed, or were planning to resume, their education (see Figure 5.2).

A different picture emerged of the unmarried teenage mothers; approximately one third of these respondents were returning, or planning to return, to school or a training program. This means that even though pregnancy disrupted the normal educational pattern, a substantial number of unmarried teenage mothers did not immediately discount continuing their education. Such a finding is encouraging from a policy perspective since it indicates that early intervention, counselling and support could re-establish these women on a more positive route toward higher educational attainment and self-sufficiency.

FIGURE 5.2

Plans for Continuing Education, by Mother's Original Age and Marital Status



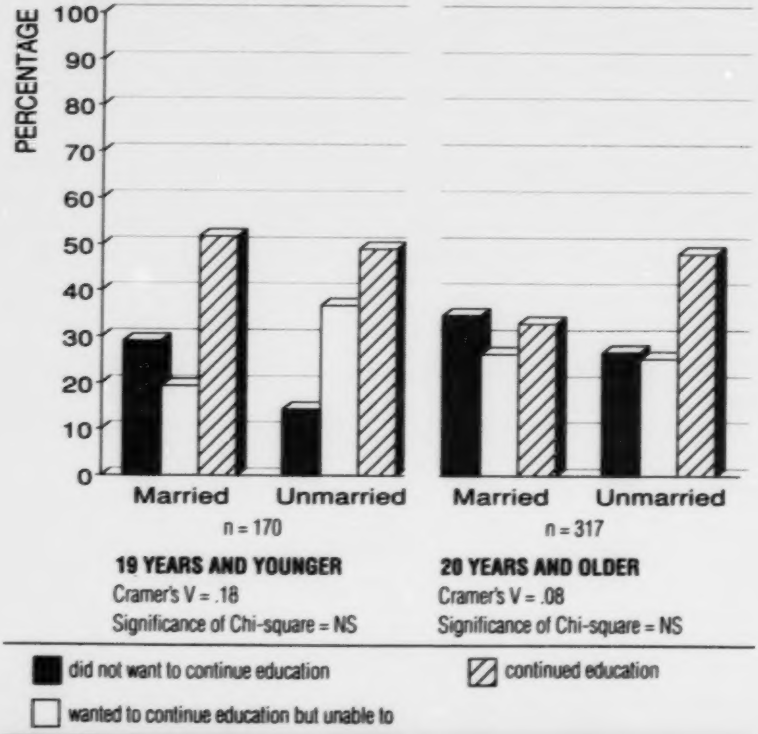
Subsequent Educational Pursuits

The aspirations of the unmarried teenage mothers also translated into immediate action. Nine months after childbirth, 20 percent of the young unmarried mothers were attending school or a training program and 8 percent had returned to school but could not continue. By the time their children reached 18 months of age, 25 percent of the young unmarried group were enroled in school or a training program and 10 percent had attended at some time but had withdrawn. The proportion of respondents returning to any type of educational institution in the other categories was substantially lower. Only 5 percent of the married mothers 19 years of age or younger, 12 percent of the married mothers 20 and over and 13 percent of the unmarried mothers 20 and over made any attempt to return to school or enrol in a training course before their first child reached 18 months of age. The initiative taken by the unmarried teenage mothers in returning to classes is another positive sign that programs directed toward easing re-entry into the educational system would be favourably received.

Even though the young unmarried mothers were the most likely to return to classes immediately after childbirth, in the long term there were few differences in the pursuit of higher educational credentials (see Figure 5.3).

FIGURE 5.3

Continuation of Education Ten Years after Childbirth by Mother's Original Age & Marital Status



By the time their children reached 10 years of age, approximately half of all the mothers in the study had resumed their education by attending school, university or some type of training program (n = 487). The majority of the courses taken by these women were concentrated in the areas of upgrading and job-specific vocational training. Few of the respondents who obtained a Grade 12 certificate after childbirth followed the traditional route of returning to school; most took upgrading through a vocational program or General Education Development (GED) examinations.

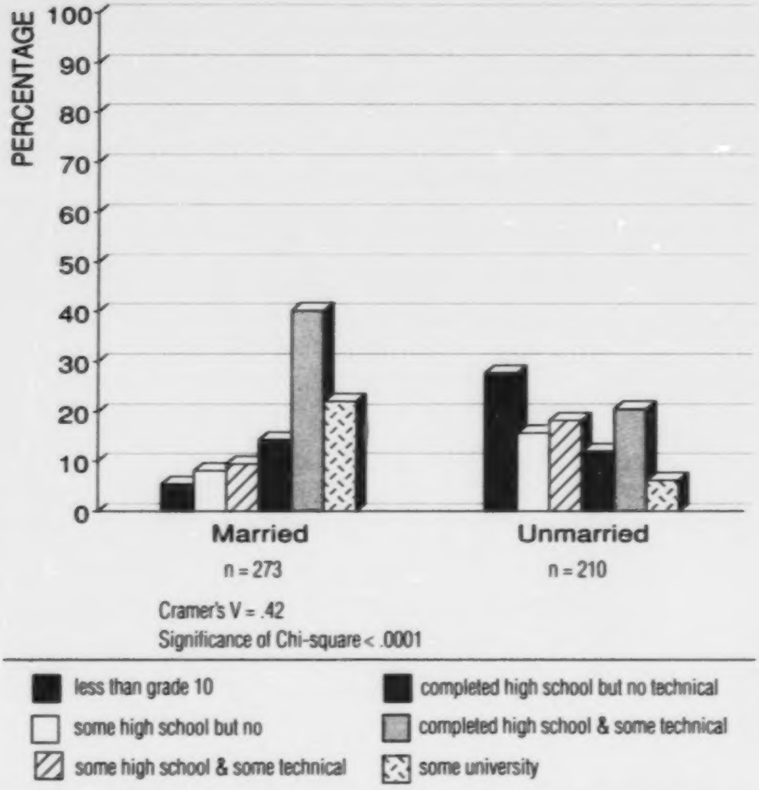
One distinction did appear among those who did not continue their education. The young unmarried mothers were the most likely to say they wanted to return to school or take a training program but were unable to do so. Once again, the results reinforce the premise that many single teenage mothers would be favourably disposed toward entering training programs if they were encouraged and offered the necessary support.

The results presented in Figure 5.3 include those mothers who had completed high school before giving birth to their first child, as well as those mothers who had not. (Discussions in later sections will focus specifically on the educational endeavours of the respondents who had not obtained this basic level of education before having a child.) When the more highly-educated members of the study group are removed, the young and unmarried mothers prove to be much more likely to continue their education after childbirth.

As would have been predicted on the basis of earlier U.S. research, even after 10 years the educational qualifications of the unmarried mothers were still substantially lower than their married counterparts (see Figure 5.4). Only 39 percent of the unmarried mothers, compared to 77 percent of the married mothers, had completed Grade 12, and the unmarried mothers were also much less likely to have obtained any technical or university training. In terms of qualifications, 35 percent of the unmarried mothers, compared to 62 percent of the married mothers, held some type of degree, diploma or certificate by the time their children reached 10 years of age (Phi = .27, Significance of Chi-square < .0001, n = 470).[25] The most frequently-mentioned credentials were in the secretarial, clerical and nursing fields. Even though the unmarried mothers showed initiative in returning to school or enroling in a training program, they started out in such a disadvantaged position that, on the whole, they were unable to catch up with their married counterparts. For example, some of the respondents who were

FIGURE 5.4

Educational Attainment 10 Years after Childbirth by Original Marital Status



Cramer's V = .42
Significance of Chi-square < .0001

in Grade 7 or 8 when they became pregnant returned to school or took upgrading to achieve Grade 10 but they were unable to complete Grade 12.

Factors that Enhance or Impede Educational Attainment

The paramount importance of education in determining life consequences makes it necessary to carefully examine the conditions or factors that enhance or impede the pursuit of secondary and post-secondary qualifications. The remainder of this chapter focuses on developing an understanding of the conditions that influence whether women continue their education after childbirth. These analyses are reported for the 396 (59 percent) respondents who had not completed Grade 12 by the time they gave birth to their first child. To assist in the interpretation of the findings, the independent variables have been organized into five categories:

1. *demographic factor*: age;
2. *parental support*: resided with parents;
3. *socio-economic factors*: welfare status of respondent, welfare status of respondent's parents;
4. *individual attributes*: planned pregnancy, dropped out of school before becoming pregnant; and
5. *role conflict*: attitudes pertaining to maternal role, marital status, employment status.

The results for these five categories are described individually and then the strengths of the factors when analyzed simultaneously are discussed. Two separate but related questions are considered:

1. What conditions influenced whether mothers considered continuing their education after childbirth?[26] and
2. What factors influenced whether mothers had actually participated in a school, technical or university program by the time their children reached 10 years of age?

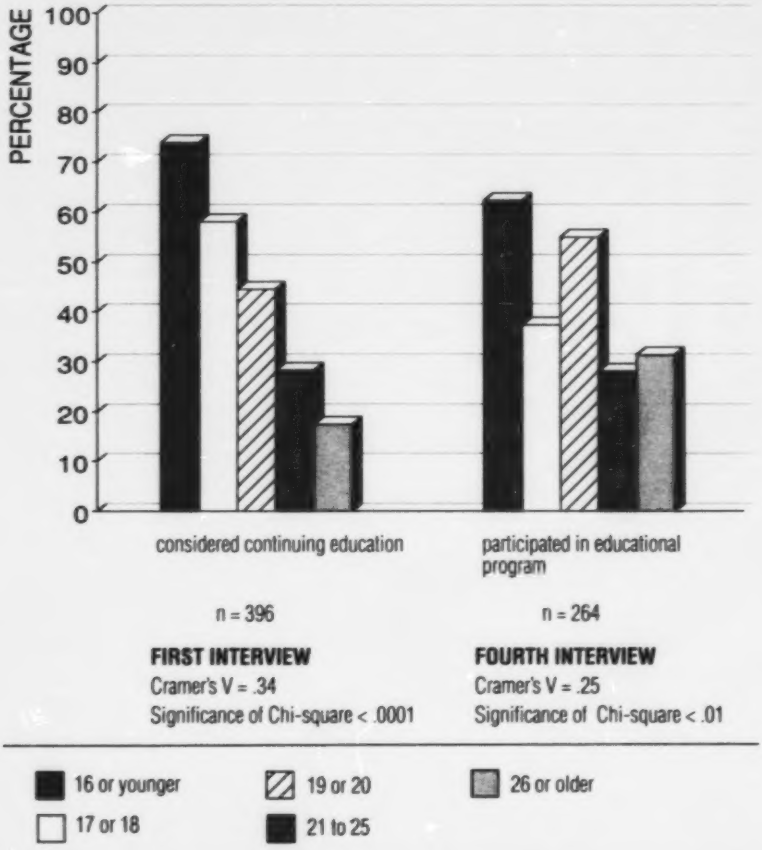
Demographic Factor

Virtually all the studies that have addressed the relationship between motherhood and educational attainment have concentrated on adolescents. Concern has repeatedly been expressed about the well-being of women who bear children during their teens. A picture is painted of a young woman who becomes pregnant by mistake, is forced to drop out of school and, as a result, is unable to complete her education or obtain a suitable job because of child-care responsibilities. As outlined in the Methodology chapter, one of the deficiencies of the existing studies is the lack of comparative data. It is impossible to accurately assess the situation of young mothers without introducing older mothers as a comparison.

This project incorporates information from a wide variety of women who gave birth to their first child when they were between 14 and 35 years of age. Even though attention has traditionally focused on the plight of teenage mothers, the younger respondents in this study were actually the most likely to be planning to continue their education after childbirth (see Figure 5.5).

FIGURE 5.5

Percentage of All Mothers who Considered Continuing Their Education and Percentage who Actually Continued Their Education After Childbirth by Age Categories



Six weeks after childbirth, 74 percent of the mothers under 17 years of age reported they had already returned, or were considering returning, to school or a training program. By the time their children reached 10 years of age, 62 percent of the women who were under 18 years of age when their first child was born had attended school, university or some type of training program.[27]

Young mothers may be the most receptive target group for upgrading, vocational and job-entry programs. However, as previously mentioned these women still may not make it through Grade 12 unless they are provided with ample support. While it is important to recognize and accommodate the initiative taken by these young mothers, it is equally important to examine the situation faced by the older women who had not completed Grade 12 before becoming pregnant with their first child. These older women seem to have been forgotten in the existing literature, or it has been implicitly assumed they had already completed high school. The results for this project show that those older women who had not completed Grade 12 before becoming pregnant were unlikely to pursue any type of upgrading or vocational training after childbirth. A number of the respondents said that they felt embarrassed about pursuing their education; they believed they would stand out from their classmates because of their age. Specialized adult education programming is needed to provide these women with a non-judgmental atmosphere conducive to learning.

Parental Support

"Several follow-up studies have demonstrated that assistance from parents and other relatives has a major influence on the likelihood a teenage mother will finish her education and obtain a job".[28] Women who remain within the family unit often receive encouragement, housing and assistance with child care, which eases the burden of studying and attending classes. The results of this research demonstrate that respondents who were residing with their parents shortly after childbirth (61 percent) were much more likely than respondents who were not residing with their parents (37 percent) to consider furthering their education (Phi = .24, Significance of Chi-square < .0001, n = 395). Similarly, by the time their children reached 10 years of age, those women who were able to stay with their parents during at least the first few months of childrearing were more likely to have participated in some type of school, university or training program. Fifty-three percent of the women who resided with their parents, compared to 40 percent of those who did not, were able to participate in some type of educational program after becoming a mother (Phi = .19, Significance of Chi-square < .01, n = 264).

Socio-economic Factors

It is frequently maintained that welfare dependence is passed down from generation to generation, with children being socialized to accept and replicate the lifestyles of their parents. Following from this argument is the scenario that women raised under such "State-dependent" conditions recognize pregnancy as a means of qualifying for social assistance which would free them from an unpleasant home environment. Thus, mothers who receive this financial support would not be expected to exhibit any educational or employment initiative.

The results of this study do not demonstrate any significant differences in the educational aspirations or endeavours of mothers whose parents had received social assistance versus mothers whose parents had not received social assistance.[29] In fact, those mothers who had been exposed to social assistance during their childhood were actually slightly more likely to desire to upgrade their educational qualifications. Of those respondents who had been reared in households where their parents did not receive social assistance, 45 percent had considered continuing their education and 40 percent participated in some type of program before their first child reached 10 years of age. Among those respondents who had been reared in households where their parents did receive social assistance, 54 percent had considered continuing their education and 41 participated in some type of program before their first child reached 10 years of age.

Respondents who received social assistance during the first 18 months after childbirth were no less motivated than respondents with more financial security. Fifty-three percent of social assistance recipients, compared to 45 percent of non-recipients, were considering continuing their education shortly after childbirth (Phi = .09, Significance of Chi-square = NS, n = 356). Likewise, slightly more of the social assistance recipients (47 percent) than the non-recipients (40 percent) had returned to school or participated in some type of university or technical program by the time their child was 10 years old (Phi = .06, Significance of Chi-square = NS, n = 249). These findings clearly do not support the proposition that providing social assistance to new mothers thwarts personal initiative.

Individual Attributes

Earlier studies have stressed the importance of individual ability, motivation, planned pregnancy and premature departure from the school system in determining educational attainment. The general argument has been that certain individual characteristics and life choices influence educational outcomes. However, these choices should not be considered in isolation from the social contexts in which they were made. Some authors have maintained that young unmarried mothers continue to have relatively low educational qualifications because they lack the desire and aptitude to continue their schooling. Unfortunately, measures of the mothers' IQs, motivation levels and/or school grades were beyond the scope of this research.

One question respondents were asked was if their first pregnancy had been planned. As outlined in the literature review, earlier research consistently demonstrated that women who chose to become pregnant usually did not expect to pursue their education after childbirth. Accordingly, 61 percent of the mothers who did not plan their pregnancy, compared to 31 percent of the mothers who did, were considering returning to school immediately after childbirth (Phi = .29, Significance of Chi-square < .0001, n = 371). Likewise, 54 percent of the mothers who did not plan to become pregnant and 26 percent of the mothers who did actually returned to school before their first child reached 10 years of age (Phi = .28, Significance of Chi-square < .0001, n = 256).[30]

The literature on teenage pregnancy and school dropouts is confusing. Although the popular wisdom is that teenage pregnancy is essentially synonymous with a failure to complete high school, no quantitative research has been undertaken to determine whether this is because these young mothers had already dropped out of school before becoming pregnant or whether their failure to complete high school was a consequence of the early transition to motherhood. Most policy-related studies have focused on the situation of the teenager who was still attending school when she became pregnant. However, the lack of comparison groups, once again, limits the application of the findings. Programs specifically designed for high school students who become pregnant may address only a small part of the problem in that many teenage, and particularly older, mothers have already withdrawn from the educational system before conceiving their first child.

In this research, those respondents who had dropped out of school before becoming pregnant were also much less likely to have been planning to return to school (Phi = .35, Significance of Chi-square < .0001, n = 396). An examination of the educational patterns of these mothers 10 years later revealed that only 35 percent of the mothers who had withdrawn from the school system before conceiving their first child, compared to 58 percent of mothers who were still taking classes when they became pregnant, had returned to school or a training program after giving birth (Phi = .21, Significance of Chi-square < .0001, n = 264). This means that programs for young mothers within the school system should be supplemented by outreach work that can contact the many women who had already removed themselves from the traditional educational system before becoming pregnant. It is important to consider counselling and support initiatives that encourage all women to remain in school at least until they have completed Grade 12.

Role Conflict

Anyone who has attempted to balance competing obligations and responsibilities can empathize with the strain women encounter when they combine the roles of mother, student, wife and/or employee. Thus, marital status and work records are important considerations in examining the educational achievements of mothers.

The initial objective of this research was to understand the circumstances unmarried mothers face. Some people assume that marriage provides support because husbands assist with childcare and financial responsibilities thereby providing their wives with more opportunities and options than are available to single mothers. However, others maintain that marriage may deter the pursuit of academic or vocational training. When the analyses were restricted to those respondents who had not completed high school before becoming pregnant, the unmarried women were significantly more likely to pursue some type of academic or vocational training after becoming a mother. Fifty-four percent of the unmarried mothers, compared to 32 percent of the married mothers, planned to continue their education immediately after childbirth (Phi = .20, Significance of Chi-square < .0001, n = 396). Similarly, 50 percent of the unmarried mothers and only 27 percent of the married mothers had participated in some type of training program by the time their first child reached 10 years of age (Phi = .22, Significance of Chi-square < .001, n = 264).

Both subjective and objective measures were used to examine the issue of employment. On a subjective level, respondents were asked to give their opinions about mothers working outside the home. Under consideration was whether traditional attitudes about mothers staying at home with their children would influence educational initiative. More objectively, work patterns were recorded shortly after childbirth to determine if mothers who entered or re-entered the labour force immediately after childbirth would be less able to continue their education. Neither opinions with respect to working outside the home nor employment records were influential in determining educational aspirations and endeavours.[31]

Relative Significance of Factors

Discriminant analysis procedures were used to examine the relative strengths of the five factors mentioned earlier in predicting whether mothers who had not completed Grade 12 before giving birth to their first child considered enhancing their education after childbirth, and whether in the long term they actually participated in some type of school, technical or university program. Table 5.1 demonstrates that the two strongest indicators of a mother's educational plans immediately following

TABLE 5.1

Discriminant Analysis for Educational Endeavours After Childbirth for Mothers with Less than Grade 12

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	considered continuing education	participated in educational program
age	-.43	-.12
resided with parants	.15	.11
welfare status of respondent's parents	.04	-.15
welfare status of respondent	.11	-.01
planned pregnancy	.30	.55
dropped out of school before becoming pregnant	.49	.27
attitudes pertaining to maternal role	.07	.22
marital status at the time of childbirth	-.04	.25
employment status	.14	.11
Significance of Wilks' lambda	< .0001	< .001
	n = 340	n = 243

childbirth were whether she was attending school or some type of training program when she became pregnant and her age.

Mothers who had left school before becoming pregnant were less likely than mothers who were involved in some type of program to consider continuing their education after childbirth. This finding emphasizes the previous recommendation for general counselling programs that encourage and support all women throughout their high school years. Once women have dropped out of school they are unlikely to consider returning. As well, young respondents were also more receptive to educational endeavours after childbirth. The older a woman was when she gave birth to her first child, the higher the probability that she had already rejected the possibility of upgrading her education. Again, this reinforces the point that future educational programming would probably be more successful if it followed a preventative rather than a reactive approach.

Ten years after childbirth the most pertinent factor in determining whether a woman had participated in some type of educational program was if she had planned her pregnancy (see Table 5.1). Those women who reported they had planned their first pregnancy were unlikely to have taken any academic or vocational courses after becoming a mother. Women who had not planned their pregnancy were more likely to want to further their education.

The findings of this research clearly demonstrate that women who were married when their first child was born had higher education qualifications than women who were not married when their first child was born. The unmarried respondents started motherhood with less education and had not caught up to their married counterparts 10 years later. However, these findings should not be taken as an indication that the unmarried mothers lacked initiative. An analysis of those respondents who had not completed Grade 12 before becoming pregnant showed that the unmarried mothers were, in fact, more likely than the married mothers to have returned to school or some type of vocational program after assuming parenting responsibilities.

From a policy perspective other factors also deserve careful consideration. Teenagers who were still attending classes when they became pregnant were the most receptive to resuming their studies. Although these young mothers require a great deal of support to enable them to remain in school, it is important not to lose sight of the older mothers who had dropped out of school before becoming pregnant. These women may need active, specialized outreach programming to assist them in upgrading their education. As well, generalized counselling and support during the high school years would be highly beneficial.

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22. The number of cases for the original study group who responded to questions on educational attainment was 669, 323 married respondents and 346 unmarried respondents.

23. Social and Economic Studies Division of Statistics Canada, ***Women in Canada***, Supply and Services Canada, 1985, p. 37.

24. The partial correlation coefficient between marital status and high school completion when controlling for age as a continuous variable was -.23, significant at the .0001 level, N = 669.

25. Grade 12 matriculation was not considered as degrees, diplomas, nor certificates.

26. Those mothers who were undecided or definitely planned to continue their education are compared to those mothers who did not plan to continue their education.

27. Using age as a continuous variable, the Pearson Product-moment Correlation Coefficient between age and educational plans was r = -.34 and between age and continuing education was r = -.17.

28. Phipps-Yonas, S. 1980, p. 416.

29. Parental receipt of welfare had no significant association with either plans to return to school (Phi = .08, Significance of Chi-square = NS, n = 371) or the respondent's continuation of her education (Phi = .01, Significance of Chi-square = NS, n = 256).

30. As would be expected, the married mothers (78 percent) were more likely than the unmarried mothers (33 percent) to have planned their pregnancy (Phi = .42, Significance of Chi-square < .0001, n = 371).

31. Respondents were asked whether they thought mothers should work outside the home. The association between this variable and educational plans was not significant (Cramer's V = .12, Significance of Chi-square = NS, n = 396). Likewise, there was not significant association between this variable and actual education endeavours after childbirth (Cramer's V = .12, Significance of Chi-square = NS, n = 264). Working outside the home shortly after childbirth was also not related to educational plans (Phi = .11, Significance of Chi-square = NS, n = 396) or educational endeavours (Phi = .02, Significance of Chi-square = NS, n = 249).

6 EMPLOYMENT

Background Literature

One of the most dramatic developments for Canadian women in recent years has been their increasing participation in the labour force. Between 1970 and 1983 the number of women engaged in some form of paid employment almost doubled; by 1980 more than half of the women in Canada over the age of 15 were employed.[1] But even though many more women are now in the labour force, the circumstances of their working lives has not changed dramatically. Women remain concentrated in relatively low-paying service and clerical occupations.[2]

In addition, unemployment rates were considerably higher in Canada for unmarried mothers with young children (6-15 years old) than for married mothers. In 1983, 16 percent of unmarried mothers with young children were unemployed compared to 10 percent of married mothers. These differences were even greater for unmarried women with pre-school children. In 1983 the unemployment rate for unmarried mothers with pre-schoolers was double (26 percent) the rate for married mothers (13 percent).[3]

Hofferth and Moore have noted that, "Early childbearers may find it possible to 'get over with' the childbearing stage and move fairly early into permanent and steady labour force participation, thus contributing to household income and gaining valuable work experience".[4] However, examinations of labour force participation rates clearly demonstrate that early childbearers are less likely to be employed than those who postpone childbirth.[5]

Even though most young mothers express a desire to work, the unemployment rate for this group is high.[6] As shown in the preceding chapter, one of the major difficulties confronting teenage mothers is their lack of educational credentials.[7] Once child-rearing responsibilities are assumed it is difficult to return to school, yet without at least a Grade 12 education employment prospects are dim.

Even if these young single mothers are able to obtain a job, the work they perform tends to be concentrated within low-skilled, traditionally female occupations.[8] The dual labour market theory has been used to help understand more fully the employment patterns exhibited by young unmarried mothers.[9] The underlying tenet of this theory is that occupations can be classified into two categories that distinguish structural differences in the work world. "The labour market consists of primary and secondary sectors, separated by barriers which are difficult to cross".[10]

> The primary market offers jobs which possess several of the following traits: high wages, good working conditions, employment stability and job security, equity and due process in the administration of work rules, and chances for advancement. The ... secondary market has jobs which, relative to those in the primary sector, are decidedly less attractive. They tend to involve low wages, poor working conditions, considerable variability in employment, harsh and often arbitrary discipline, and little opportunity to advance.[11]

Osterman refined the basic dual labour market perspective even further by subdividing the primary sector. "Within the primary sector each occupation is assigned to the upper or lower tier on the basis of the degree of autonomy and personal participation enjoyed by workers in that occupation".[12] Some examples of occupations found within the two sectors are:

upper tier primary - professors, lawyers, physicians;

lower tier primary - secretaries, teachers, nurses; and

secondary - waitresses, telephone operators, fish packers.

Numerous obstacles have been identified that restrict women from moving into primary sector jobs:

> ...they include inadequate enforcement of affirmative action legislation and regulations, lack of access to apprenticeship programs, insufficient education, and stereotyped ideas of what constitutes 'women's work'.[13]

Young unmarried mothers are frequently forced to accept employment in the secondary sector because they do not have the necessary educational credentials or work experience to qualify for more favourable positions in the primary sector.[14] Not only do these secondary sector jobs offer little more than minimum wage, but there are few opportunities for advancement into more rewarding, higher-paid positions. By the time such working mothers account for childcare, travel and other work-related expenses, there is little left to pay the bills.[15] It is not surprising therefore, that the jobs obtained by teenage mothers are found to provide few intrinsic or extrinsic rewards.[16]

> Early parenthood is associated with diminished employment success, both in terms of salary and job satisfaction. This finding persists even after controlling for other confounding factors, such as socio-economic status and race.[17]

Although most of the literature portrays a direct link between early childbirth and subsequent employment prospects, certain factors have been found that exacerbate or, alternatively, mitigate these negative repercussions.[18] If young mothers are able to return to school they have a better chance of moving into primary sector career paths.[19] Conversely, those mothers who bear more children, especially in rapid succession, or experience difficulties with their health or their children's health are likely to be severely hampered in their employment pursuits.[20] Trussell has also presented the argument that early entry into the labour market can enhance the employment prospects of adolescent mothers.[21]

> The primary impact of teen childbearing on wages is likely to operate through the two sources of human capital, though perhaps in opposite ways. Education is likely to be curtailed by pregnancy, especially if it occurs in high school. On the other hand, the woman may enter the labour market earlier and thus acquire more labour market experience.[22]

The relevant literature on employment, similar to the discussion of educational attainment, has concentrated primarily on teenage pregnancy. This is significant for the present research because a larger proportion of the unmarried than married mothers were 19 years of age or younger when their first child was born. Therefore, any differences observed between the work histories of married and unmarried mothers may be more reflective of differences in age rather than marital status.

Results

The objective of this chapter is to explore the possibility that work patterns differ between married and unmarried mothers. First, are unmarried women who bear children disadvantaged in the labour market? Second, if these women are found to hold a disadvantaged position, is this a result of their marital status or more appropriately attributed to such factors as age and educational attainment? The results have been divided into four sections: labour force participation rates over the 10-year period following childbirth; obstacles to employment; the career paths of mothers by the time their first child reached 10 years of age; and an examination of the determinants of final salary attainment.

Labour Force Participation Rates

One of the most pronounced labour force trends reported by Statistics Canada over the last two decades has been the ever-increasing employment of married women.[23] The proportion of married women in the workplace almost doubled between 1967 and 1981.[24] By 1983, there was virtually no difference between the labour force participation rates of mothers who reported a husband at home and those who reported no husband at home.[25] The married mothers in this project, however, exhibited higher rates of employment than those who were single when their first child was born (see Figure 6.1).

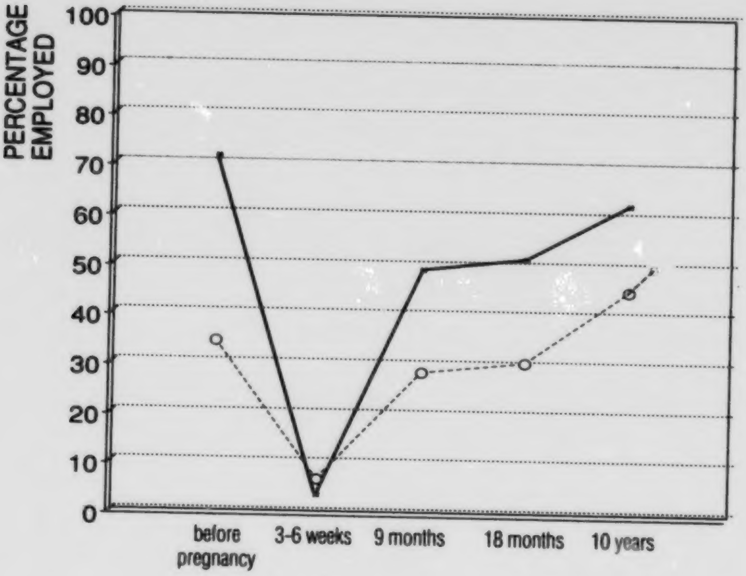
At the time of conception, 71 percent of the married mothers, compared to only 34 percent of the unmarried mothers, were working. But this discrepancy decreased over time; only 12 percent more married than unmarried mothers were working by the time their first child reached 10 years of age. Another discrepancy between the married and unmarried mothers occurred within the older age group. In general, labour force participation rates were lowest among the young respondents, with 48 percent of both the married and unmarried mothers holding a job. While the older unmarried mothers (53 percent) were more likely to be employed than the young mothers (48 percent), the older married respondents were clearly the most successful in securing a job (64 percent).[26]

Although a smaller percentage of unmarried than married mothers were employed, those who were able to secure a job did not exhibit any different commitment to the workforce. Among mothers who had held a job at any time after childbirth, the married mothers spent an average of five years and seven months in the workforce while the unmarried mothers spent an average of five years and two months in the workforce ($t = 1.99$, $p = NS$, $n = 372$).

Nationally, Statistics Canada data show a higher unemployment rate among women with young children when no husband is present in the household.[27] Similarly, in this research, the mothers who were single when their first child was born were more likely to have experienced some period of involuntary unemployment during the 10-year research period. Forty percent of the unmarried mothers, compared to only 20 percent of the married mothers,

FIGURE 6.1

Labour Force Participation Rates by Original Marital Status



	before pregnancy	3-6 weeks	9 months	18 months	10 years
	n = 672	n = 672	n = 635	n = 594	n = 488
Phi	.37	.07	.21	.21	.12
Significance of Chi-square	< .0001	= NS	< .0001	< .0001	< .01

——•—— Married ------○----- Unmarried

reported at least one period of unemployment (Phi = .22, Significance of Chi-square < .0001, n = 469). Once again the older married mothers were the least likely to have been involuntarily out of work. Only 17 percent of the older married respondents, compared to 46 percent of the older unmarried, 40 percent of the married teenage and 36 percent of the unmarried teenage respondents, had experienced difficulties obtaining employment.

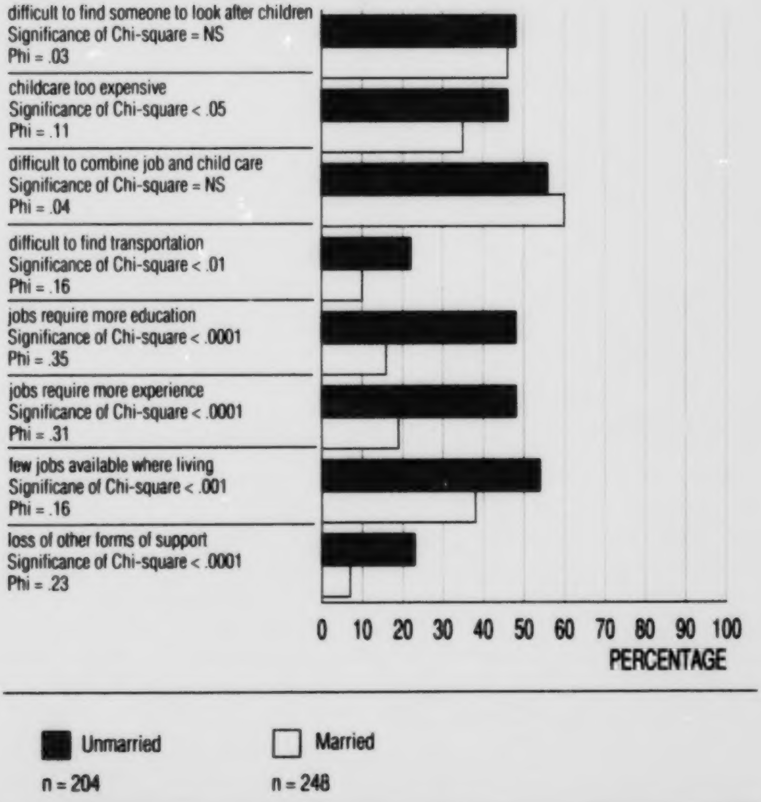
Obstacles to Employment

To assess the obstacles to employment confronted by mothers all respondents were asked to indicate what factors or conditions made it difficult or impossible for them to work. The most frequently-mentioned problem areas were: the difficulty of combining work and childcare responsibilities; the difficulty of finding someone to care for children; the unavailability of jobs; and the expense of childcare. For problems related to childcare, a significant proportion of mothers reported concerns about the lack of quality care available; the high costs; and having few relatives or friends in the immediate area for assistance with childcare.

Comparisons by marital status revealed that the unmarried mothers experienced substantially more employment-related problems than the married mothers (see Figure 6.2).

FIGURE 6.2

Percentage of Mothers Who Experience Various Obstacles to Employment after Childbirth by Marital Status



Given the educational differences discussed in Chapter 5, it is not surprising that the unmarried mothers perceived themselves as being disadvantaged in the labour market because of their negligible educational credentials (Phi = .35, Significance of Chi-square < .0001, n = 452). Contrary to Trussell's argument, this educational deficit was not offset by an accumulation of work experience. As previously mentioned, Trussell maintained that early childbearing decreased educational attainment but encouraged early entry into the labour market, which provided valuable work experience. Forty-six percent of the teenage respondents, compared to only 22 percent of the older respondents, felt that their employment potential was restricted by a lack of education; however, teenage mothers were also more likely (47 percent) than older mothers (24 percent) to perceive themselves as lacking appropriate work experience. Thus, these two variables do not operate in opposite directions; early childbirth restricts both education and work experience.[28]

Even after accounting for age differences, unmarried mothers were consistently more likely to report that they lacked the education and experience necessary for most jobs.[29] Age and marital status exhibit independent effects, with young unmarried mothers being the least likely to perceive themselves as having the necessary qualifications for employment. In addition, at the time of the fourth interview only 2.9 percent of the young married mothers and 5.6 percent of the young unmarried mothers were attending school full time or part time. For the older mothers these figures were slightly higher, with 8.2 percent of the married mothers and 12.0 percent of the unmarried mothers attending school full time or part time.

Inadequate educational and work experience were not the only obstacles confronted by unmarried mothers, however. Women who were single when their first child was born were more likely to reside in areas where jobs were scarce (Phi = .16, Significance of Chi-square < .001, n = 452) and a lack of transportation prevented them from working in another location (Phi = .16, Significance of Chi-square < .001, n = 452).

The most pronounced difference in terms of employment availability was again exhibited among the older respondents, with 37 percent of the married mothers, compared to 58 percent of the unmarried mothers, experiencing problems finding a job in the community where they were living.[30]

Finally, the unmarried mothers were more likely to express concerns about the loss of child support, social assistance or unemployment insurance in relation to obtaining a job (Phi = .23, Significance of Chi-square < .0001, n = 452). The next chapter will show that the unmarried mothers received a significantly higher proportion of their total household income from sources other than salaries. Under such conditions working becomes feasible only if the wages received counterbalance the loss of other revenues, such as social assistance or child support.

This problem of lost support was equally prevalent among married teenage, unmarried teenage and older unmarried respondents (22 percent), but was virtually non-existent for married mothers who conceived their first child after they reached 20 years of age (5 percent).

During the first 10 years of their children's lives unmarried mothers experienced substantially more difficulties in securing employment than married mothers. Women who were single when their first child was born felt they were disadvantaged in the labour market because they lacked employment-related skills, were unable to travel long distances to work and could not obtain employment that offered wages sufficient to sustain them without other forms of government or private assistance.

Careers Ten Years After Childbirth

Statistics Canada data reveal that women still tend to be highly concentrated in a few restricted occupational groups.

> Although the number of women with jobs had increased dramatically over the decade [from 1971 to 1981], they continued to work in occupations in which women had traditionally been in the majority. In fact, the percentage of women in the experienced labour force who reported working in clerical, service, sales, medicine and health and teaching occupations increased to 74% in 1981 from 71% ten years earlier.[31]

Similarly, the results of this project revealed that 68 percent of the working mothers held jobs in clerical, service, sales, medical or teaching fields (see Table 6.1).[32] The married mothers were over-represented in the teaching and nursing professions, while the unmarried mothers were more likely to hold jobs as cleaners, maids and fish packers.

As mentioned in the literature review, the dual labour market theory concentrates on structural differences that define individuals' occupations and their career prospects. It has been repeatedly maintained that one of the major problems faced by

TABLE 6 1

Current or Most Recent Occupations by Mother's Original Marital Status

	Married	**Unmarried**	**Total**
Clerical			
secretaries, receptionists clerks, and stenographers	21%	14%	18%
Service			
cleaners, maids, and chambermaids	1	11	5
babysitters	9	9	9
waitresses, cooks, kitchen helpers, and bartenders	8	10	9
fishing and fish packers	4	12	7
Sales	10	12	11
Medical			
nurses, nurse's aids, CNAs, and medical technicians	14	6	11
Teachers	8	1	5
Other	25	25	25
	n = 214	n = 170	n = 384

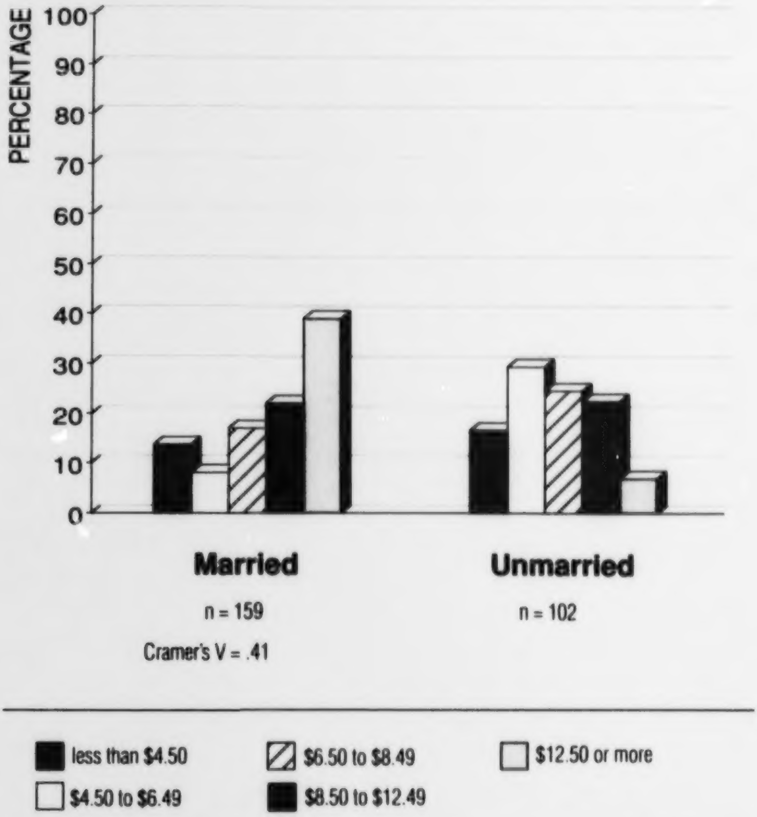
Cramer's V = .34
Significance of Chi-square < .0001

women, and mothers in particular, is that the work they perform tends to be concentrated in the secondary sector, which offers little room for advancement or movement into more rewarding primary sector jobs. In this project, the Osterman index was used to classify the most recent occupation for all respondents who had been employed at any time after their first child was born.[33] Only five of the 384 working respondents held jobs that placed them in the upper tier of the primary sector. Unmarried mothers were also significantly more likely than married mothers to hold jobs in the secondary sector (Phi =.28, Significance of Chi-square < .0001, n = 385). Thus, even when the unmarried mothers obtained employment, they worked in occupations defined as "dead-end" positions. Sixty percent of both the young married and the young unmarried mothers, and 46 percent of the older unmarried mothers were employed in secondary sector jobs. By striking contrast, only 24 percent of the older married mothers held such low-level positions.

Although some of the traditionally "female" jobs, such as teaching and nursing, command relatively high salaries, others such as baby sitting and sales, are clearly at the lower end of the spectrum. In conjunction with previously-cited occupational differences, the hourly wages received by unmarried mothers were significantly lower than the hourly wages received by married mothers (see Figure 6.3).[34] Thirty-nine percent of the married mothers, compared to only 7 percent of the unmarried mothers, earned $12.50 or more an hour. At the lower end of the pay scale, 22 percent of married mothers, compared to 46 percent of unmarried mothers, earned less than $6.50 an hour.[35]

FIGURE 6.3

Hourly Wages by Marital Status



The differing levels of occupational prestige and salary attainment between married and unmarried mothers were not accompanied by differences in the amount of time spent working. Although unmarried mothers were receiving lower salaries than married mothers, no distinctions existed in terms of either part-time versus full-time (Phi = .07, Significance of Chi-square = NS, n = 262) or part-year versus full-year (Phi = .09, Significance of Chi-square = NS, n = 253) employment.[36]

To summarize, women who were not married when their first child was born tended to have less desirable career patterns than women who were married when their first child was born. The unmarried women were more likely to have occupations such as baby sitting, cleaning and fish packing, which clearly placed them in the secondary labour market. In terms of hours worked per week, weeks worked per year and total number of months of employment, unmarried and married mothers exhibited equal commitment to the labour force. However, this commitment offered much better pay offs for the married mothers who were more likely to hold jobs in the primary sector that provided relatively high pay and opportunities for advancement.

Determinants of Salary Attainment

The concluding section of this chapter uses salary as a proxy for relative employment success. It is clear that the unmarried mothers differ from the married mothers in many ways other than marital status. For example, preceding analyses have provided evidence that the unmarried group tended to be younger and had much lower educational levels than their married counterparts. Thus, it is important to understand whether observed salary differences were a direct result of marital status or could more appropriately be attributed to other considerations.

Previous studies have highlighted a number of factors that may determine the relative success or failure of women in the work force:

1. age of mother when first child was born;
2. conception of subsequent children;
3. educational attainment of mother;
4. health of mother and child;
5. labour force experience; and
6. sector of employment.

As outlined in the literature review, there is disagreement whether "age at childbirth" is positively or negatively related to career attainment. Some argue that teenage motherhood encourages early entry into the labour force, which builds valuable work experience at a young age.[37] However, many others argue that early childbirth deters successful career development by impeding educational pursuits.[38] Regardless of the direction, the association between "age at childbirth" and "salary attainment" is thought to be indirect. It is not the age at which one assumes childrearing responsibilities but the effect this has on other characteristics, such as education and work experience, that determine future employment rewards.

Further complexities are introduced through the dual labour market theory. If women obtain jobs in the secondary sector they have little or no room for promotion or upward mobility and, therefore, continue to receive low wages throughout their working lives. Alternatively, the salaries of women employed in the primary sector usually begin at a higher level and continue to increase.[39]

The predicted direction of the other correlations are quite consistent. Greater educational attainment and labour force experience would be expected to enable mothers to obtain more highly-paid jobs, while the conception of subsequent children or the poor health of mother or child would be expected to hamper employment prospects. Although family size has been highlighted as an important consideration in the U.S. literature, few of the mothers in this study had exceptionally large numbers of children.

The factors above were entered into a regression equation, along with marital status, to determine if marital status per se affected subsequent salary attainment or if unmarried mothers received lower salaries because of other considerations. Are single mothers disadvantaged in the labour market simply because they weren't married when they bore their first child? Or does their inferior position result from other accompanying characteristics, such as low educational attainment, poor health and/or the nature of the work they perform?

The results displayed in Table 6.2 clearly delineate the significance of "years of education" and "sector of employment" in relation to salary attainment. Those mothers who completed Grade 12 and continued in post-secondary studies received higher salaries than women who dropped out of the school system. Likewise, those women who held jobs within the primary sector received higher salaries than women who

TABLE 6.2

Multiple Regression for Salary Attainment Ten Years After Childbirth

	Beta
age of mother at childbirth	.13
marital status at the time of childbirth	.01
conception of subsequent children	.02
number of years of education held by mother	.27[a]
child any chronic illnesses	.08
mother any chronic illnesses	.04
number of months in the workforce since childbirth	.12
dual labour market sector	.26[b]
Multiple R = .59, p < .0001	
n = 254	

[a] p < .001
[b] p < .001

remained within the secondary sector. Once education and sector were taken into consideration none of the other factors, such as martial status, age, number of children, health or length of time spent working, made any significant contribution in determining salary attainment.

As outlined in the previous chapter, education is an important prerequisite for success in the labour market. Without basic educational credentials, mothers have little opportunity of moving into jobs that command acceptable salary levels. Thus, from a policy perspective, it is important to provide the necessary incentives and supports for women to remain within the school system, at least until they have obtained Grade 12. Women who become pregnant while still attending school need both financial and childcare support to enable them to provide for their children without being forced into low-skill, low-paid employment.

An even more difficult situation occurs among the older mothers who dropped out of school before conceiving their first child. The longer these women stay out of the educational system, the more difficult it is for them to return. In this case, early intervention and alternative programming are important considerations. Counselling sessions and individual assistance are required to understand and correct the circumstances that cause women to quit school at an early age. In addition, alternative educational schemes are needed to enable non-traditional or older students to continue their education in a supportive, non-threatening environment.

It is also clear that those women who are employed in secondary sector jobs receive relatively low financial remuneration for their work. A number of authors have down-played the detrimental employment effects of teenage childbearing, noting that these young mothers enter the labour market at an early age which enables them to accrue valuable work experience.[40] Unfortunately, this proposition is based on the assumption that there is a direct positive relationship between the length of time spent in the labour force and salary levels. The dual labour market theory calls this direct correlation into question. Even if women who become mothers during their teens enter the labour force at an early age, the experience they obtain does little to enhance their salaries when the jobs they hold are concentrated within the secondary sector. As long as these women are employed in dead-end jobs there is little hope that even many years of experience will translate into tangible long-term rewards. The association between "months worked" and "salary attainment" is of no consequence once the effect of sector location is removed.

In the final analysis, the employment patterns exhibited by mothers depend, to a large extent, on educational qualifications and occupational differences. If a woman drops out of school before completing Grade 12 and goes to work as a cleaner or waitress, she is unlikely to move into a position that offers a satisfactory salary. Employment in secondary sector jobs translates into long-term financial deprivation because there is virtually no means of advancement.

Footnotes

1. *Women in Canada: A Statistical Report*, Statistics Canada, 1985, Catalogue number 89-503F, p. 41.

2. *Women in Canada: A Statistical Report*, Statistics Canada, 1985, Catalogue number 89-503F, p. 41.

3. *Women in Canada: A Statistical Report*, Statistics Canada, 1985, Catalogue number 89-503F, p. 45.

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7. Rees, S. "People, Places and Policies: A Call for Different Approaches", Chapter 1 in *How the Poor Would Remedy Poverty*. Coalition of Human Needs, 1000 Wisconsin Avenue NW, Washington, DC 20007, 1988, p. 2.

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11. Piore, M.J. "The Dual Labour Market" in *Problems in Political Economy*. David Gordon (ed.). Lexington, Mass: D.C. Health and Co., 1971, p. 92.

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13. *Women, Children, and Poverty in America: A Working Paper from the Ford Foundation*, 1985, pp. 21-22.

14. Evans, *Work, Welfare and the Single Mother: A Dual Labour Market Investigation*, 1985.

15. Itzkowitz, G., and S. Rees. "Poverty in the Midst of Plenty: Washington, DC". Chapter 8 in *How the Poor Would Remedy Poverty*. Coalition of Human Needs, 1000 Wisconsin Avenue NW, Washington, DC 20007, 1988, p. 106.

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Furstenberg, F., et al. 1987, pp. 8, 51, 54.

Trussell, T.J. 1976, pp. 185-186.

21. Trussell, T.J. 1976, p. 184.

22. Trussell, T.J. 1976, p. 184.

23. *Charting Canadian Incomes 1951-1981*, Statistics Canada, 1984, Catalogue number 13-581E, p. 11.

    Women in the Work World, Statistics Canada, 1984, Catalogue number 99-940, p. 5.

24. *Charting Canadian Incomes 1951-1981*, Statistics Canada, 1984, Catalogue number 13-581E, p. 11.

25. *Women in Canada: A Statistical Report*, Statistics Canada, 1985, Catalogue number 89-503F, p. 49.

26. By the time of the fourth data collection, only 31 of the original young married mothers could be located and interviewed. Because of the small number of cases in this category, all age specific correlations reported for the fourth data collection have been double-checked after adding in the new group of 70 teenage married mothers.

27. *Women in Canada: A Statistical Report*, Statistics Canada, 1985, Catalogue number 89-503F, p. 59.

28. A more detailed examination of the implications of restricted experience for career achievement can be found in the discussion of multivariate relationships at the end of this chapter.

29. Percentage who felt they required more education: teenage married 18 percent, teenage unmarried 52 percent, older married 16 percent, older unmarried 42 percent. Percentage who felt they required more work experience: teenage married 32 percent, teenage unmarried 50 percent, older married 17 percent, older unmarried 46 percent.

30. Percentage of teenage mothers who reported that there were few jobs available in the area where they were living: married 46 percent, unmarried 52 percent.

31. *Women in the Work World*, Statistics Canada, 1984, Catalogue number 99-940, p. 10.

32. The occupational figures refer to the current or most recent job held by the respondent.

33. Osterman, P. "An Empirical Study of Labor Market Segmentation". *Industrial and Labour Relations Review*, 28(4), July 1975, p. 513.

34. Pearson's r was also computed for the association between marital status and salary, using salary as a continuous rather than a categorical variable. The results were as follows: $r = -.31$, $p < .0001$.

35. The Nova Scotia minimum wage was $4.00 for 1988 and $4.50 for 1989. Nine percent of the married mothers and 12 percent of the unmarried mothers were actually earning below minimum wage at the time they were interviewed.

36. Part-time work is defined as less than 35 hours per week and part-year work is defined as less than 49 weeks per year (Statistics Canada, 1984, p. 17).

37. Hofferth, S.L., and K.A. Moore. 1979, p. 785.

    Trussell, T.J. 1976, p. 184.

38. Rees, S. 1988, p. 2.

    Furstenberg, F., et al. 1987, p. 7.

    Polit, D.F., 1987, p. 7.

    Women, Children, and Poverty in America: A Working Paper from the Ford Foundation, 1985, pp. 6, 7, 12, 21.

    Women and Their Children: Descent Into Poverty, 1984, p. 8.

39. The argument has sometimes been made that the association between salary and sector position is tautological. Although it is true that the theoretical basis of the dual labour market perspective stresses financial remuneration; on an empirical level, one is examining the relationship between occupational groupings and salary levels.

40. Hofferth, S.L. and K.A. Moore. 1979, p. 785.

    Trussell, T.J. 1976, p. 184.

7 HOUSEHOLD INCOME

Background Literature

Most of the U.S. literature, based on cross-sectional studies or aggregate national statistics, shows that unmarried women, especially young women, who bear children experience long periods of welfare dependence and often become trapped in a life of poverty.[1] Older women who receive social assistance as a result of widowhood or divorce tend to find other means of support in a relatively short time[2] while unmarried women who enter the social assistance system because they had a child during their teenage years are more likely to be long-term recipients.[3] As a result of analyzing national data on single mothers, Murray and Laren concluded that, "Whatever else she does: a poor woman who wishes to get out of poverty ought not to have a baby out of wedlock".[4]

In contrast to these discouraging predications, the longitudinal research of Furstenberg et al., on adolescent mothers showed, "Unlike the popular stereotype, most teenage mothers did not become chronic welfare recipients".[5] They noted that, "Of the 70 percent who ever received welfare during the course of the study, close to two-thirds went off the welfare rolls (before their first child reached 12 years of age)."[6]

The apparent discrepancy between the conclusions of Furstenberg et al., and those presented in other studies may result from the fact that Furstenberg's research concentrated exclusively on adolescents. Although welfare dependence among these mothers diminished over time, the original rate was so high that even after a marked decline the percentage receiving social assistance often remained higher for this group than for the general population. However, the lack of a comparison group made it impossible to assess the relative welfare dependence of the teenage respondents in relation to older and/or married mothers.

From a policy perspective, it is most important to determine how those single mothers who became self-sufficient differed from those mothers who continued to rely on social assistance. The accepted premise has been that young unmarried mothers have two ways out of poverty and welfare dependence: marriage or employment.[7] But more detailed research has shown that neither of these routes is infallible because economic success depends on many other considerations. It has been hypothesized that factors such as educational attainment, sector of employment, subsequent pregnancies and exposure to the welfare system also influence the length of welfare dependence and the economic status of the mother.

Marriage does not always solve the financial problems encountered by single mothers. If a husband is disabled, unemployed or has low earning potential, his contribution may be insufficient to raise the household income above the poverty line.[8] In addition, if women marry at an early age the risk of divorce and future economic hardship is high.[9]

At first it appears that employment is the only effective means by which mothers can obtain enough income to adequately support themselves and their children. However, this study and many other U.S.-based studies have demonstrated that young unmarried mothers usually obtain secondary sector jobs that do not provide salaries high enough to support a family above the poverty line.[10] For instance, researchers in the U.S. report that,

> The home health-care industry employs many workers who move back and forth between — and sometimes combine —paid employment and various income transfer programs. This "revolving door" phenomenon is particularly common among single mothers, who need jobs providing sufficient income and medical benefits to cover their family's needs, but often lack the skills to qualify for more than marginal employment.[11]

As shown in the previous chapter, education is a critical determinant of salary levels among both unmarried and married mothers, and many authors have discussed the relevance of secondary and post-secondary education in helping women move above the poverty line.[12] Burden and Klerman have pointed out that, "Findings would indicate that programs and policies aimed at assisting mothers to stay in school are a good long-term economic investment (because increased educational attainment decreases dependence on social assistance)".[13]

Intertwined with discussions on self-sufficiency is the ongoing dispute over whether exposure to the welfare system creates long-term dependence. Although single mothers comprise approximately 36 percent of the Provincial Family Benefits caseload in Nova Scotia each year, it is not known if they are the same mothers each year or new applicants. However, in Ontario the average single recipient of social assistance remains on benefits for about seven months and the average single mother for three and a half years. These figures suggest that long-term dependency on social assistance occurs infrequently in Canada. In addition, more than half of the poor in Canada are the working poor for whom social assistance is not available.[14]

A final concern discussed in the U.S. literature is that subsequent pregnancies adversely affect the pursuit of self-sufficiency. "Having begun childbearing at such an early age, teenage childbearers tend to have larger families by the time they are in their mid-20s than do women who delay childbearing".[15] This prevalence of large family size is thought to be a primary determinant of long-term "state" dependence.[16] Given that the mothers in our study do not have large families, the relationship of state dependency and family size is unlikely to occur in the way described in the U.S. literature.

Although the U.S. literature has revealed many complexities pertaining to the economic prospects of unmarried teenage mothers, the hypotheses remain speculative. After analyzing aggregate figures, Murray and Laren concluded that the answers to their questions could only be obtained from comprehensive research that concentrated specifically on the issues surrounding unmarried teenage motherhood.

> In the course of examining the data, I found persistent signs that women who come onto AFDC [Aid to Families with Dependent Children] as single women and those who come onto AFDC after a marital breakdown respond to AFDC in quite different ways. I present this as a speculation that I encourage others to explore. A number of factors are confounded (such as: the never-married women also tend to be younger; the never-married tend to have begun from a poorer economic situation; etc.), and the only way around these is a thorough multivariate analysis.[17]

Results

Similar to discussions in earlier chapters, the literature on income dynamics is almost exclusively U.S. based. Although this material provides insight into the pertinent factors that must be considered, there are important discrepancies between the American and Canadian contexts. One area of divergence, previously outlined in this report, is the issue of family size. On the basis of non-representative samples drawn in the United States, researchers have maintained that unmarried mothers remain in poverty throughout their lives because they have repeat pregnancies. Given the smaller family sizes reported in this study, it is doubtful this factor will prove as important in the examination of poverty for unmarried mothers in Nova Scotia.[18]

Murray and Laren also aptly note that existing U.S. studies do not go far enough in unravelling the complexities of the inter-relationships among such factors as age, marital status and educational attainment. The sample for this research has been drawn to permit not only a descriptive discussion of general trends but also a multivariate analysis of the factors related to the total household income of unmarried mothers 10 years after childbirth.

Thus, this research sheds new light on some long-lasting controversies pertaining to the economic well-being of teenage and/or unmarried mothers. The results are presented in three areas: receipt of social assistance over the 10-year research period, financial resources of mothers 10 years after childbirth and an examination of factors related to total household income.

Receipt of Social Assistance Over the Ten Years

Filinson reported that one-quarter of the families with an eldest child born to an unmarried mother, compared to 7 percent of the families with an eldest child born to a married mother, were dependent on State benefits for their major source of income.[19] In the *Mothers and Childrens* study, by the time their first child reached 10 years of age, 65 percent of the unmarried mothers had received Provincial Family Benefits or Municipal Social Assistance while 11 percent were currently receiving those benefits. By comparison, only 13 percent of the married mothers had received any such financial support within the same 10-year period (Phi = .54, Significance of Chi-square < .0001, n = 444) with only 2 percent currently receiving benefits.

Women who were married and over 19 years of age when their first child was born were clearly the least likely to find themselves in a position that necessitated application for social assistance (10 percent). While the unmarried teenage mothers were the most likely to have received social assistance (69 percent), neither the married teenage (43 percent) nor the older unmarried mothers (56 percent) were immune from reliance on government support.

The high incidence of government financial support within this study population should not however, be taken as evidence of perpetual dependence on the system. Only 16 of the 488 respondents interviewed for the final data collection had been receiving social assistance for nine or more years. Although the young unmarried mothers were the most likely to have received government support at some time, the duration of such payments was highest for the older unmarried mothers. Among social assistance recipients, 43 percent of the older unmarried mothers, compared to only 23 percent of the unmarried teenage mothers, 18 percent of the married teenage mothers and 18 percent of the older married mothers, received benefits for at least half of the 10 years under study. The average number of years on social assistance was lower for the married mothers (two years, one month) than the unmarried mothers (three years, five months) ($t = 2.45$, $p < .01$, $n = 138$). The mean duration of social assistance receipt was one year, six months for married teenage mothers; two years, two months for older married mothers; three years, two months for unmarried teenage mothers; and four years for older unmarried mothers.[20]

The results from this project reinforced Murray and Laren's findings that unmarried women who bore a child were not only the most likely to receive social assistance but were also the most likely to draw such benefits for a long period of time.[21] However, the effect of the mother's age was not quite as straightforward as portrayed in the literature. Although unmarried teenage mothers exhibited a high probability of being social assistance recipients, the length of time for which they drew benefits was slightly lower than for the older unmarried mothers.

Financial Resources Ten Years After Childbirth

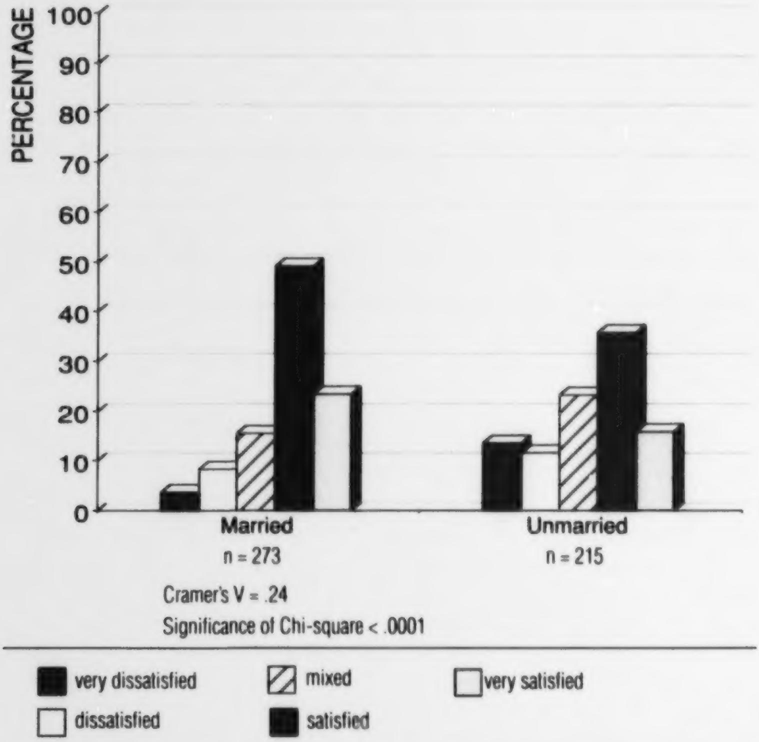
Even 10 years after childbirth it was clear that women who were not married when they had their first child were still in disadvantaged financial situations. The average monthly household income of $1,972 for unmarried mothers was much lower than the average monthly household income of $3,085 for married mothers ($t = 6.64$, $p < .0001$, $n = 474$). Once again, the older married respondents stood out as having the most favourable position with an average monthly income of $3,184. The average monthly incomes for the other categories were: married teenage mothers $2,327; older unmarried mothers $2,011; unmarried teenage mothers $1,948.[22]

Although it is important to understand the relative income placement of the married and unmarried mothers, perhaps a more pertinent issue is whether reported incomes are sufficient to sustain a comfortable and acceptable level of existence. In keeping with the differences in income levels reported above, unmarried mothers gave a less positive assessment of their financial situation than married mothers (see Figure 7.1). At the time of the final data collection approximately one-quarter of the unmarried mothers, compared to only 12 percent of the married mothers, said they were "dissatisfied" or "very dissatisfied" with their existing finances.[23]

What does it mean to be poor? While individuals may hold their own opinion about what poverty is, "the official definition of poverty attempts to define the level of income necessary for the basic necessities of life".[24] For empirical purposes, Statistics

FIGURE 7.1

Satisfaction with Financial Situation Ten Years After Childbirth by Mother's Original Marital Status



Canada has developed low-income cut-offs, "which are set at levels where, on average, 58.5 percent of income goes to food, clothing and shelter. The low income cut-offs vary according to size of family and of community."[25]

For example, in 1988 acceptable annual incomes ranged from a low of $8,553 for a single person in a rural area to a high of $32,950 for a family of seven living in a large city.[26] The National Council on Welfare has used these low-income cut-offs to ascertain variations in poverty levels over time and across provinces.[27] In 1988 the poverty rate of 14.5 percent among Nova Scotia's families was slightly higher than the national figure of 12.3 percent.[28]

In addition, Statistics Canada has reported that the percentage of poor single-parent families in Canada headed by a female increased between 1973 and 1986 from 19.5 percent to 27.4 percent. Single-parent families, especially those headed by a female, were far more likely than other families to be poor. Although two-parent families outnumbered single-parent families by about eight to one in 1986, the number of poor single-parent families closely rivalled the number of poor two-parent families.[29]

The overall poverty rate of 32.8 percent for project respondents was substantially higher than either the national or the Nova Scotian level. At the time of the final data collection, 18 percent of the married mothers and an astounding 53 percent of the unmarried mothers were living in households where their total financial resources were inadequate to provide for basic necessities (Phi = .37, Significance of Chi-square < .0001, n = 469). In both teenage and older-age categories, the unmarried respondents were significantly more likely to have household incomes below the poverty line, even 10 years after childbirth. Fifty-four percent of the older unmarried mothers, 52 percent of the unmarried teenage mothers, 29 percent of the married teenage mothers and 16 percent of the older married mothers, were living below the Canadian poverty line.

Other research has shown not only that the financial resources of unmarried mothers never catch up with their married counterparts but that the sources from which families derive income differ substantially between these two groups.[30] Table 7.1 illustrates some significant differences in the breakdown of household income for the married and unmarried mothers in this study.[31]

Ten years after childbirth a husband or partner's salary accounted for the largest proportion of total household income for both mothers who were single at childbirth and mothers who were married. However, there was still a large discrepancy, with the husband's salary representing 62 percent of the household income for the original married group and only 37 percent of the household income for the original unmarried group. On the other hand, the unmarried mothers received proportionately more money from non-salary sources such as social assistance, unemployment insurance and regular contributions from family or friends.

In general, women who give birth to a child and are not married are more likely to experience financial difficulties throughout their lives. Ten years after childbirth the household incomes of these women still reflected a relatively high reliance

TABLE 7.1

Average Percentage of Household Income Received from Various Sources Ten Years After Childbirth by Mother's Original Marital Status

	Married	**Unmarried**	**t**
mother's salary	23%	22%	.65
husband or partner's salary	62	37	7.56[a]
contributions of family or friends	1	3	-2.98[b]
social assistance	3	17	-6.12[c]
unemployment insurance	4	12	-3.66[d]
other sources	7	9	-2.12
	n = 267	n = 207	

[a]. $p < .0001$ [b]. $p < .001$ [c]. $p < .0001$ [d]. $p < .0001$

on government payments as a source of support, and half of them did not have financial resources sufficient to raise them above the poverty line.

Factors Related to Total Household Income

The question that remains is: why do women who bear children outside marriage experience financial difficulties? Is their relatively disadvantaged position a direct consequence of conception before marriage? Or is their low household income more reflective of other characteristics, such as reduced schooling, early entry into the responsibilities of parenthood or an embedded reliance on government support payments? Many factors may affect income attainment:

1. age of mother at first childbirth;
2. number of children;
3. sector of employment;
4. marital status at childbirth;
5. current marital status;
6. welfare status of mother's parents;
7. original welfare status of mother; and
8. educational attainment.

Table 7.2 provides the bivariate correlations between each of these eight factors and household income.

TABLE 7.2

Pearson Product-moment Correlation Coefficients of Various Factors with Total Household Income Ten Years After Childbirth

	r	n
number of years of education held by mother	.44[a]	414
sector of employment	.38[b]	425
current marital status	-.36[c]	470
age of mother at childbirth	.31[d]	474
original marital status at childbirth	-.29[e]	474
current employment status of mother	.21[f]	474
original welfare status of mother	-.17[g]	473
welfare status of mother's parents	-.16[h]	458
number of children	.10	469

[a]. to [h] $p < .0001$

In marked contrast to the U.S. literature, family size does not have a significant influence on financial circumstances. The hypothesis that mothers who were unmarried at the time they gave birth remain in poverty because they continue to have many children was not supported in this research.[32] The small correlation that does exist between family size and household income is actually positive rather than negative.

With the exception of family size, all of the other factors listed in Table 7.2 reveal significant correlations with household income. Mothers who had either received social assistance, or were raised in families that had, still tended to be residing in households with low financial resources many years later. Likewise, respondents who were single when their first child reached 10 years of age and/or who had low educational levels were also relatively disadvantaged.

Although "current employment" was positively associated with household income, a substantially stronger correlation existed between "sector of employment" and income. As demonstrated in the earlier breakdown of income sources, on average, the mother's salary formed only a small contribution to the total household finances. Approximately one-quarter of the mothers who were employed at the time of the final data collection were still living below the poverty line. More importantly, the respondent's employment made the most significant contribution to household income only when she held a primary sector position. (Unfortunately, due to problems of multicollinearity, employment and employment sector cannot be used in the same regression equation. Therefore, only employment sector is used for such analyses.)

When the eight factors listed above are simultaneously entered into a regression equation, current marital status, educational attainment and employment sector stand out as having a significant association with household income (see Table 7.3). Whether the mother was married when her first child was born was of little consequence in determining total household income once other factors were considered.

TABLE 7.3

Multiple Regressions for Salary Attainment Ten Years After Childbirth

	Beta
number of years of education held by mother	.23[a]
sector of employment	.19[b]
current marital status	-.21[c]
age of mother at childbirth	.13
original marital status at childbirth	-.01
original welfare status of mother	-.01
welfare status of mother's parents	-.08
number of children	.06
Multiple R = .56	
	n = 421

[a]. to [c]. p < .0001

Those women who were living with a husband or common-law partner by the time their first child was 10 years old were in a better financial situation than their single counterparts. Household income was dependent upon whether the mother was married at that time, not whether she had been married at childbirth. Single mothers who entered into a marriage oı common-law union after childbirth had an average monthly household income of $2,402, while mothers who remained unattached had an average monthly household income of only $1,046 (t = 8.12, p < .0001, n = 203). Similarly, married mothers who subsequently divorced, had an average monthly income of $1,448 in comparison to an average monthly income of $3,224 among those women who remained married (t = 8.54, p < .0001, n = 267). As previously discussed, by the time their child reached 10 years of age a partner's salary provided the largest contribution to household income for the mothers who had been single at childbirth, as well as for the mothers who had been married at childbirth.

But marriage is not the only solution to low-income levels, educational attainment and employment sector are also significant determinants of household income. Women with secondary and post-secondary education are less likely to experience financial difficulties in terms of the total resources of the household. Once again, these findings reinforce the key importance of schooling. The benefits of programs that assist women in continuing their education cannot be overstated.

Finally, the sector of employment of the mother is also an important consideration. As previously mentioned, mothers who hold jobs in the primary sector have total household incomes that are higher than mothers who are not working or who are employed in the secondary sector. Simply holding a job is not always an answer to maintaining a high standard of living. As pointed out by the Ford Foundation in the United States, one of the primary prerequisites for economic independence among women is the reduction or elimination of the barriers that hamper them from moving into primary sector occupations.[33]

The results presented in this chapter demonstrate that the economically-disadvantaged position of single mothers at childbirth is not a short-lived phenomenon. Even 10 years later, women who bore their first child without being married had lower household incomes, were more likely to fall below the poverty line and were significantly more dissatisfied with their financial situation. There are, however, certain factors which mitigate the negative effects of bearing a child while single. Subsequent marriage, increased education and primary sector employment are all positive contributors to income attainment.

Footnotes

1. Mills, R. "In this land of plenty, many struggle for basics". *The* [Halifax] *Mail-Star*, 22 February 1988, p. 14.

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2. Murray, C., and D. Laren. *According to Age.* Longitudinal Profiles of AFDC Recipients and the Poor by Age Group. Prepared for the Working Seminar on the Family and American Welfare Policy. American Enterprise Institute for Public Policy Research, Washington, D.C., Marquette University, Milwaukee, WI. September 1986, pp. 40-41.

3. Spivak, H., MD, and M. Weitzman, MD. "Social Barriers Faced by Adolescent Parents and Their Children". *The Journal of the American Medical*, 258, September 18, 1987, p. 1501.

   Murray, C., and D. Laren. 1986, pp. 46, 63.

4. Murray, C., and D. Laren. 1986, p. 90.

5. Furstenburg, F., et al. *Adolescent Mothers in Later Life.* New York: Cambridge University Press, 1987, p. 40.

6. Furstenburg, F., et al. 1987, p. 40.

7. Polit, D.F. 1987, pp. 6-7.

8. *How the Poor Would Remedy Poverty.* Coalition of Human Needs, 1000 Wisconsin Avenue NW, Washington DC 20007, 1988, pp. 12 and 83.

   Moore, K.A., et al. "Teenage Motherhood". *Children Today.* 8(5), 1979, p. 14.

9. Spivak, H., MD, and M. Weitzman, MD. 1987, p. 1502.

   Burden, D.S., and L.V. Klerman., 1984, p. 12.

   Moore, K.S. et al. 1979, p. 14.

   Baldwin, W.H. "Adolescent Pregnancy and Childbearing — Growing Concerns for Americans". *Population Bulletin*, 31(2), 1977, p. 27.

10. *Women and Their Children: Descent into Poverty*, 1984, pp. 7-8, A-20.

11. *Women, Children, and Poverty in America*, 1985, p. 21.

12." FYI Report: Teenage Mothers — 17 Years Later". *Children Today*, 17. January-February 1988, p. 2.

Polit, D.F. 1987, pp. 6-7.

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13. Burden, D.S., and L.V. Klerman., 1984, p. 13.

14. Ross, D.P., and R. Shillington. *The Canadian Fact Book on Poverty*. Ottawa, Ontario: The Canadian Council on Social Development, 1989, p. 19.

15 . Moore, K.A. et al. 1979, p.14.

16 . Spivak, H., MD, and M. Weitzman, MD. 1987, p. 1502.

Burden, D.S., and L.V. Klerman., 1984, p. 13.

17. Murray, C., and D. Laren. 1986, p. 49.

18 . Race has also been an important consideration for American-based studies on income dynamics.

Women, Children, and Poverty in America, 1985, p. 10

Murray, C., and D. Laren. 1986, p. 16

However, there were too few Black respondents in this research to identify any racial differences (n = 16 or 5 percent). The sample for this study was drawn to be representative of the general population, and, according to Statistics Canada figures, only 1 percent of Nova Scotians are Black.

Statistics Canada: *Nova Scotia Profiles Part 1*, Supply and Services Canada, 1986

19. Filinson, R. "Illegitimate Birth and Deprivation: Recent Findings from an Exploratory Study". *Social Science and Medicine*, 20(4), p. 311.

20. Although these breakdowns provide interesting insights, further research is needed to verify or replicate this trend. The number of cases receiving social assistance in the various age and marital status categories is small:

teenage married n = 11, teenage unmarried n = 79, older married n = 16, older unmarried n = 32. The mean duration of social assistance for the total group is approximately 3 years.

21. Murray, C., and D. Laren. 1986.

22. The results of a one-way analysis of variance demonstrate a statistically significant difference among the means for the four age and marital status groups ($F = 16.19$, $p < .0001$, $n = 474$).

23. The association between marital status and subjective assessment of income was further checked by the formation of an index which included three seperate but related items: assessment of the adequacy of finances over the ten year period after child birth, satisfaction with current income, and a comparison of the current financial situation with the financial situation at childbirth. The Standardized Cronbach's alpha for this index was .72. As verification of the association shown in Figure 7.1, there was a statistically significant correlation between marital status and this index. ($r = -.19$, $p < .0001$).

24 . *How the Poor Would Remedy Poverty*, 1988, "Executive Summary", p. i.

25. Battle, K. *Poverty Profile 1988*. National Council of Welfare, Brooke Claxton Building, Ottawa, Ontario, K1A 0K9, p. 4.

26. Battle, K. *1988 Poverty Lines*. National Council of Welfare, Brooke Claxton Building, Ottawa, Ontario, K1A 0K9, p. 9.

27. Battle, K. *Poverty Profile 1988* and *1988 Poverty Lines*.

    Official Statistics Canada figures were not available in time for the analysis of the data for this study; therefore, the reported poverty lines are based on National Council of Welfare estimates for 1988.

28. Battle, K. *Poverty Profile 1988*, p. 10.

29. Ross, D.P. and R. Schillington. 1989, pp. 41-45.

30. Moore, M. "Women Parenting Alone". *Canadian Social Trends*. Ottawa: Statistics Canada, Winter 1987, p. 34.

31. The results in Table 7.1 were derived on the basis of individual percentages. A percentage of the total household income was calculated for each source for each respondent and then averaged.

32. An examination of only the unmarried mothers showed virtually no association between completed family size and total household income ($r = .05$, $p =$ NS).

33. *Women, Children, and Poverty in America*, 1985, pp. 21-22.

8 SOCIAL RELATIONS

Background Literature

When women become mothers their lives change profoundly. Unlike so many other changes in status, motherhood results in a new relationship that lasts a lifetime. Motherhood causes major family upheavals and significantly alters the new mother's duties and responsibilities.

Major changes associated with motherhood include a different pattern and amount of sleep, new responsibility for the well-being of the child and different relationships with partners, family members and friends. In part these changes occur because of the near constant demands of a young child and the priority given these demands. Less time is available for other people and activities. Also, as a mother, a woman has a different status in society which may be reflected in her relationships with family and friends.

Although this major change in status is something the majority of women experience in contemporary society,[1] research on how women adapt to this new status is not comprehensive. Married or single, becoming a mother requires major adjustments in a woman's life, but despite the central importance of this change and the frequency of it, there are few reliable studies that examine the consequences of these changes and how they are actually experienced.[2]

The understanding of how women prepare for and adapt to having a child is based more on informal accounts or case studies than on comprehensive research. Indeed, while much of the discussion about motherhood takes place in the popular press, there is little to complement this in the social science journals, and what is available concentrates on specific issues rather than the range of issues that mothers encounter as their children develop. Reports, for instance, may deal with childrearing patterns and the ways in which different groups of mothers treat their children, but there is little to describe or explain the information mothers have about childrearing, where they obtained this information and whether they consider their knowledge adequate.

Nevertheless, popular and academic reports do suggest a number of concerns that are important to the well-being of mothers and to the healthy development of children. In particular, the issue of mothers being assisted by networks of relatives and friends is seen as significant for both the mother and her child. It is an important factor in counteracting a mother's isolation, which can be psychologically harmful, and which may result in less appropriate childcare since the mother has no one to ask for advice or guidance.[3]

The demands of a young child can be such that mothers have little time for themselves and few opportunities to pursue activities other than childcare and related household chores. This can make it difficult to meet people and maintain social networks. To the extent that mothers are part of a pattern of social relationships, however, it is likely that isolation will be less of a problem, and that mothers will be able to maintain other interests and friendships that provide a relief from the consuming nature of childcare. In addition, they will have access to others who can assist with the children, either by helping with their actual care or by giving advice and moral support.

Concern for unmarried mothers, particularly young unmarried mothers, has resulted in some studies of the support networks used by, and available to, these women.[4] It would appear that the issue of married women becoming mothers is non-problematic since there are few studies on how these women cope with the changes necessitated by motherhood. Consequently, it is difficult to say how different the experiences of unmarried mothers are from those of married mothers. Perhaps because husbands are present in these latter families, it is assumed that married women will not experience the isolation many unmarried mothers do. Being married and having children is considered "normal" and there is an expectation that most couples will cope.

There is considerable anecdotal evidence, however, that young married mothers who spend the greater part of the day alone with a young child do experience social isolation.[5] Most husbands are certainly no better equipped to take on childcare responsibilities than their wives and certainly spend considerably less time in this role.[6] The idea that husbands may be particularly helpful in the transition to motherhood may, therefore, have more to do with an idealized version of the family than reality. One would also expect that young married couples will experience more difficulties than older couples because they may be less well prepared financially to be parents and have lower levels of maturity and understanding about parenthood.

Young unmarried mothers, on the other hand, are seen to epitomize the difficulties encountered by mothers as they are inexperienced, financially dependent and have an ambiguous status. Such mothers are often thought to be particularly ill-equipped to care for children. Studies of these mothers are typically concerned with the woman's capacity to raise her child. Also, because the mothers have relatively low levels of education and limited labour force experience, if any, they are not financially independent and assistance must come from the family, usually the mother's, or through social assistance programs. Economic well-being is only one aspect of the issue, however. As important is the mother's knowledge of childcare and her access to others when help is needed on a regular basis or in an emergency. Mothers who are isolated and stressed and who have no social support from family or friends are thought to be most at risk with respect to their own mental health and in their capacity to properly care for a child.[7]

Research on this issue, primarily from the U.S., is contradictory. These studies also have to be regarded cautiously because they often report on only a small number of women unlikely to be representative of all unmarried mothers. Indeed, these women are more likely to be among the most disadvantaged group in U.S. society. The one finding that has received some support in the literature is that young unmarried mothers and their children fare better if they stay with their family than if they establish independent households. As well, mothers who stay with their families have a greater chance of returning to school or going to work because there is more assistance with childcare and this assistance is typically free.[8]

Because young unmarried mothers need help, families may respond to a greater extent than they do with young married mothers. By getting married young women have declared their independence and, consequently, families may feel fewer obligations. In fact, young married mothers have reported more stress than unmarried mothers because their husbands are seen as the main support but these husbands are not well prepared for fatherhood.[9] Because unmarried daughters have reversed what is seen as the normal sequence of events, it seems that many families recognize the extraordinary nature of these circumstances and respond with assistance. Many of the very young mothers, of course, have not left the parental home at the time of their pregnancy and families often continue to support and assist these daughters.

It appears typical for unmarried mothers to stay with their parents for a limited time then establish their own households within a few years of the birth of their child. It would be tempting, therefore, to suggest that the best path for all young unmarried mothers is to stay at home while the baby is very young, but there is some evidence that not all families benefit from this arrangement. Questions have been raised about the ability of some families to cope with the new child, especially if the grandmother is in the labour force and unable or unwilling to assist with daily childcare. Also, the family dynamics are undeniably changed when a daughter becomes a mother and siblings may feel excluded and neglected. While there are reports that a new baby may lessen conflict and reintegrate the young mother into the family, there is also evidence that some families cannot and should not take on the extra burden associated with an unmarried mother.[10]

Obviously it should not be assumed that simply being part of a network of family and friends is automatically beneficial. Friends and relatives can indeed reduce stress — but they can also create it. Friends may inadvertently do this by wanting to involve the young mother in their regular activities unmindful that the young mother has to deal with the competing demands of her child. Families can increase stress through conflicting advice, demands on the mother's time and reminders about what is "owed" to the family. Schinke reports that the most frequent causes of stress for adolescent mothers, married or unmarried, are:

> unsolicited and unwanted advice, criticism and gratuitous negative comments from others (e.g., from mothers, siblings, extended family members, friends, conjugal and dating partners), negative emotional states (e.g., anxiety, depression, fatigue), excessive and unreasonable demands from others (e.g., family, friends, conjugal and dating partners, teachers, employers), social isolation, lack of necessary tangible resources (e.g., transportation, financial support from conjugal partners), conflicts between significant others (e.g., between family and friends, between mothers and conjugal or dating partners), perceived absence of personal control (e.g., feeling unable to reduce one's own discomfort and negative emotions, to change personally undesirable habits and behaviour), and childcare demands (e.g., lack of preparation for a parenting role, locating suitable daycare).[11]

A balance between an unhealthy isolation and total immersion and loss of independence in a social network is clearly required.

Results

The following discussion on the social support and leisure activities is drawn from a series of questions designed to assess the mothers' social circumstances and well-being in relation to their childrearing responsibilities. Questions were asked about help with childrearing, leisure activities at home and outside the home, factors which prevented participation in such activities and the mothers' sense of their links to social networks.

Support with Caring for the Children

An important means by which mothers, especially those with young children, maintain contacts outside the home is through the support and assistance of family and friends. Since caring for young children can be an all-encompassing task, help from others not only relieves mothers of some of the responsibility they feel but also gives them an opportunity to be involved in non-child-related activities. In each of the four interviews completed for this study, the mothers were asked whether they had anyone helping them take care of their child — e.g., family member, husband, friend — or whether they were the sole caretaker. Over the 10-year period the figures change dramatically from 72 percent of mothers saying they were the sole caretaker at the first interview to 57 percent at the second and third interviews to 17.4 percent at the final interview.

These figures are intriguing. It is evident that in the first interview many married women did not indicate that their husbands were helping. The data suggest that the majority of women saw themselves as exclusively responsible for childcare, regardless of whether they had a partner. However, by the second and third interviews, when the children were approximately six months and 18 months old, close to 42 percent of the mothers indicated they were receiving help raising the child and this figure rose to 81.7 percent by 1988-89.

While part of this increase is related to the fact that a majority of the unmarried mothers married and had husbands to help with childrearing, it may also be related to a changed definition of responsibility on the part of mothers and involvement on the part of their husbands and other care-givers. This data forcefully suggest that while children are infants the mothers see it as their sole responsibility to care for them. The changes in responsibility for childrearing over the 10-year period can be seen as one indication that the mother's sense of social isolation does decrease with time, at least to the extent of having someone with whom she can share these responsibilities. The data also suggest that a sense of social isolation may be strong for many mothers with young children.

Another indication of belonging to a social network is whether mothers have someone they can ask to take care of the child for an afternoon or an evening, or, when necessary, for an extended period of time. Over the 10-year period the percentage of mothers who had no one to call upon for short periods of care decreased from 7.9 percent at the time of the first interview to 5 percent at the second interview, 3 percent at the third interview, and 1.9 percent at the fourth interview. For assistance with longer-term care the corresponding figures are 10 percent, 6 percent, 5 percent and 2 percent.

By the time of the fourth interview, therefore, virtually all the mothers had both short-term and longer-term assistance, a further indication of social connection. While more mothers have no one they can call on for longer-term care, compared with short periods of care, more mothers also have only one person who could assist in these circumstances (40.7 percent for longer-term care compared to 30.5 percent for short-term care). Such findings indicate that while most mothers can call on others for assistance, the networks are not overly extensive; indeed, the absence of one person could mean no alternative care is available at all.

Also in the fourth interview, 68 percent of the mothers indicated they always had someone with whom they could talk with about the child, if necessary. Of the remaining mothers, 23.3 percent said they usually had someone to talk with, and only 8.6 percent indicated they had less access to this type of help, with virtually no one (0.2 percent) saying they never had anyone to talk with.

The general trends over the 10-year period indicate improvement in the mothers' circumstances, at least to the extent of being able to call on others for specific assistance with childcare. Looking in detail at the data from the last interview however, it is apparent that not all mothers benefit equally from these general improvements. As was discussed in the chapter on the family, those mothers who were unmarried, and older unmarried mothers in particular, have different experiences in relation to family formation from those mothers who were married at the time their first child was born.

Not surprisingly, family composition relates in part to the patterns of childcare the children experience. In particular, more unmarried mothers report being solely responsible for their children. Of the married mothers, 12.5 percent are sole caretakers compared to 25.0 percent of the unmarried mothers (Phi = 0.17, Significance of Chi-square < 0.001, n = 540). In particular, it is the older unmarried mothers who are most likely to report being a sole caretaker (38 percent) compared to the older married mothers (8.5 percent), (Phi = 0.35, Significance of Chi-square < 0.0001, n = 305). For the young women there is no significant difference between the married and unmarried mothers, with 21 percent of the former and 19 percent of the latter group in this position. Thus young mothers are more likely to be sole caretakers than older married mothers, but less likely than the older unmarried mothers. These findings are not surprising considering that the majority of mothers report depending on their husbands for longer-term or short-term assistance with the children.

As was reported in the Family chapter, however, older unmarried mothers have the lowest rate of marriage and the highest rate of marital dissolution and, consequently, are the group least able to call on husbands for assistance. Young unmarried mothers, while having high rates of marriage, are similar to their married counterparts in having higher rates of marital breakdown than the older married mothers. These factors explain, therefore, why there are differences among the groups with respect to being sole caretakers and why the older married women are the ones least likely to be in this position.

Further information on the mothers' access to social networks was gained by the mothers indicating whether there was someone they could rely on if they had a problem, and whether they experienced any loneliness. At least 80 percent of each of the four groups said they usually or always had someone they could count on for help. Slightly less than three percent of the mothers indicated that finding such assistance was a problem since they never, or not very often, had someone they could count on. Indeed, close to two-thirds of all the young mothers — both married and unmarried — and the older married mothers were always able to be in contact with someone who could help. The older unmarried mothers were in a somewhat different position in that 51 percent always had someone they could rely on for help. This assistance is also less secure than the help available to the other older married mothers as it is less readily available (Cramer's V = .21, Significance of Chi-square < .01, n = 317).

A somewhat similar finding occurs with loneliness. The older unmarried mothers are more likely to report being lonely. For instance, while 26 to 31 percent of the other mothers report never being lonely only 18.7 percent of the older unmarried mothers say this is the case. Conversely, they have the highest percentage (8 percent) who say they are usually or always lonely, in comparison, for example, to the 2 percent of older married mothers who say they are usually or always lonely (Cramer's V = 0.16, Significance of Chi-square < 0.05, n = 317).

These figures suggest that, generally, mothers have access to a reasonable level of support and do not suffer from loneliness. This generalization, however, should not hide the fact that there is a small percentage of mothers who appear to be unconnected and isolated. Older unmarried mothers, in particular, are likely to encounter difficulties in accessing adequate support networks.

Participation in Outside Activities

Another way mothers can be involved socially is through participation in various community organizations where they not only meet people outside their immediate social network but likely pursue these activities outside the home. For mothers this means an opportunity to be away from the responsibilities of both the home and childcare.

Here again the distinctiveness of the older unmarried mothers is revealed. Five different types of organizations were examined and four sets of significantly different relationships were found. Three of these relate to comparisons between older married mothers and older unmarried mothers. Mothers were asked about whether they belonged to and/or participated in a church, and whether they belonged to and/or participated in any church groups such as Sunday school, the Catholic Women's League or a choir; in any community groups such as Home and School, the Lionettes or municipal associations; in any support groups such as single-parent groups, AA or Parents with Hearing-impaired Children; or in any group with organized activities such as sports teams, dance classes or theatrical productions.

The mothers report the highest level of participation — 69.2 percent — with church membership and it is the older married women who have the highest level of membership (82.2 percent) (see Table 8.1). This figure is considerably higher than those of the other groups and helps explain why the level of belonging is significantly different for the older married and older unmarried groups (Phi = 0.197, significance of Chi-square < 0.001, n = 280). The older unmarried women have a level of involvement similar to the young women, with close to 60 percent of them belonging to a church.

TABLE 8.1

Percentages of Mothers Belonging to Organizations by Mother's Original Age and Marital Status

Organization	19 years and Under		20 years and Over	
	Married	Unmarried	Married	Unmarried
church	62.0	56.0	82.2	63.0[a]
church group	15.0	9.7	28.0	11.5[b]
community group	21.9	7.8[c]	24.0	24.7
support group	7.0	9.0	8.0	9.5
activity group	34.0	35.0	40.5	25.0[d]

[a] Phi = 0.19, significance of Chi-square < 0.001, n = 280
[b] Phi = 0.16, significance of Chi-square < 0.01, n = 280
[c] Phi = 0.21, significance of Chi-square < 0.01, n = 224
[d] Phi = 0.18, significance of Chi-square < 0.05, n = 279

Although the majority of mothers belong to a church, which gives some indication of where they might look for some types of assistance, this says nothing about whether they are frequent or regular attenders at church. In looking at participation in church groups the figures are considerably different. Except for the older married women, the percentage of women who belong to church groups is less than one-quarter of those who belong to a church. For the young unmarried women the drop between belonging to church and participation in church groups is 46.3 percent, with less than 10 percent of these mothers being involved in such groups. Young married mothers also show considerably lower levels of participation; only 15 percent are engaged in these activities. The older married mothers, however, present a different picture. More than 25 percent are involved in church groups compared with 11.5 percent of the older unmarried mothers (Phi. = 0.161, significance of Chi-square < 0.01, n = 280).

With respect to community organizations it is the young unmarried mothers who have the lowest level of involvement (7.8 percent), while the other groups show considerably higher levels of participation, ranging from 21.9 percent to 24.7 percent. For the young mothers, the difference between the married and unmarried groups is statistically significant (Phi = .210, significance of Chi-square < .01, n = 224). It is difficult to explain the different levels of participation since there is no information on whether specific groups are easily accessible to all the mothers, nor on the specific interests of the mothers. Nevertheless, the findings suggest that the mothers are likely to be more interested in groups with organized activities such as sports teams, fitness classes or musical groups. Over a third of the young mothers and the older married mothers participate in such groups compared to 25 percent of the older unmarried mothers. The young mothers have virtually identical levels of involvement but because the older mothers represent both the highest and the lowest levels of involvement, the variation between the two groups of mothers is significant (Phi = .186, significance of Chi-square < .05, n = 279).

Specialized support groups have the lowest levels of involvement. This finding is probably related to the specific nature of these groups since mothers presumably join because of particular circumstances in their lives, such as a child or relative with an illness, or being a single parent. Less than 10 percent of the mothers belong to these specialized groups and, although not statistically significant, there is a slight tendency for the unmarried mothers to belong to these groups more than the married mothers.

It is apparent from these findings that participation in community organizations, with the exception of church, is an activity of a minority of mothers with young children. The data also indicate that most mothers belong to only one type of organization, if church is excluded. While differences in the rates of participation may reflect, in part, different interests, they are also likely to reflect differences in opportunity due to lack of time and money, and possibly transportation and access. Still, a considerable number of mothers are able to participate in various types of organizations and in this way maintain contacts with people outside the home suggesting that this use of leisure time is an important connection with the larger community. The older married mothers, in particular, are active in these social organizations.

Restrictions on Leisure Time

Although there are many similarities among the mothers in terms of the difficulties of going outside the home to engage in an activity, it is the unmarried mothers who have the more dispersed responses. More of the unmarried mothers are likely to say they "never" or "not very often" experience difficulties, and, at the other extreme, say they "usually" or "always" have difficulties. Close to half of the mothers report very few difficulties, 46 percent and 54.6 percent of the young married and young unmarried mothers respectively, and 46.7 percent and 49.4 percent for the corresponding groups of older mothers.

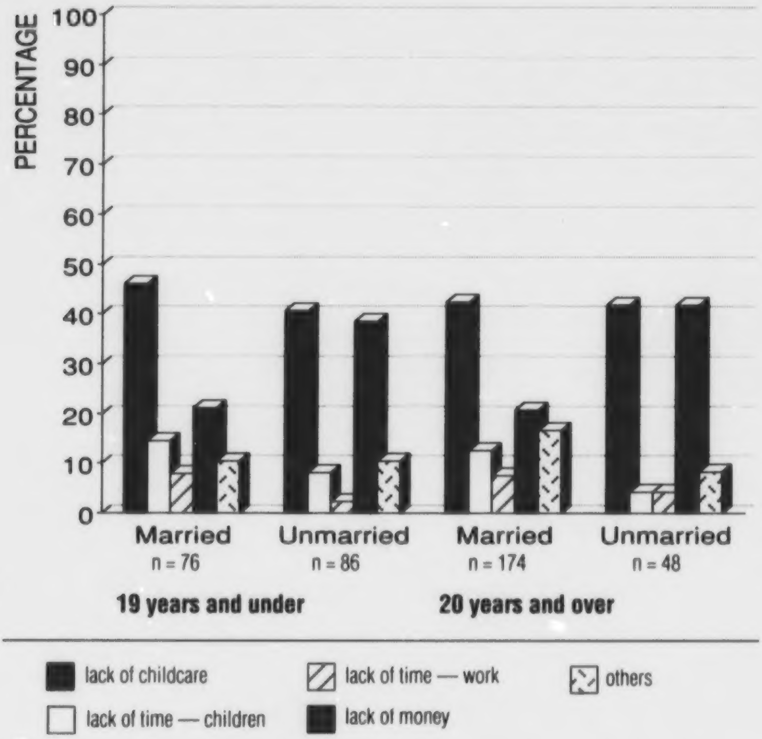
The young mothers are more likely to report never having difficulties, a finding which may be explained by the younger mothers having more people to call on, by their going out less frequently or by their participating in activities that the children also attend. Smaller numbers of mothers report usually or always having difficulties — 12.5 percent of the young married, 14.9 percent of the young unmarried, 12.8 percent of the older married, and 18.7 percent of the older unmarried women.

The most frequently-cited reasons for not being able to go out are not having anyone to look after the children and lack of money. While between 40.7 percent and 46.0 percent of the four groups indicated lack of childcare as a primary reason, considerably more of the unmarried than married mothers cited lack of money. For the young unmarried mothers this accounted for 38.4 percent of the responses compared to 21.0 percent of the young married mothers. In the older group, the unmarried mothers indicated that lack of childcare and lack of money were equally significant (41.7 percent in each category) while the older married mothers were twice as likely to choose lack of childcare (42.5 percent) over lack of money (20.7 percent) (see Figure 8.1).

Pursuing recreational activities at home might create fewer difficulties but the mothers would still require some free time and often money. Of the 257 mothers who indicated why it was difficult to do things at home, roughly half said the difficulties related to childcare, for instance, the children interrupted or needed attention. The second most common response was a lack of time because of work-related activities — 27.6 percent of the young mothers and 31 percent of the older mothers cited this as a reason. Lack of money was not an issue for the majority of mothers, suggesting perhaps that home-based leisure pursuits are less expensive. Other reasons mothers gave for the difficulties they experienced included lack of energy, competing demands from the extended family or volunteer commitments, and ill health.

FIGURE 8.1

Reasons Why it is Difficult to Go Out for Leisure Pursuits, by Mother's Original Age and Marital Status

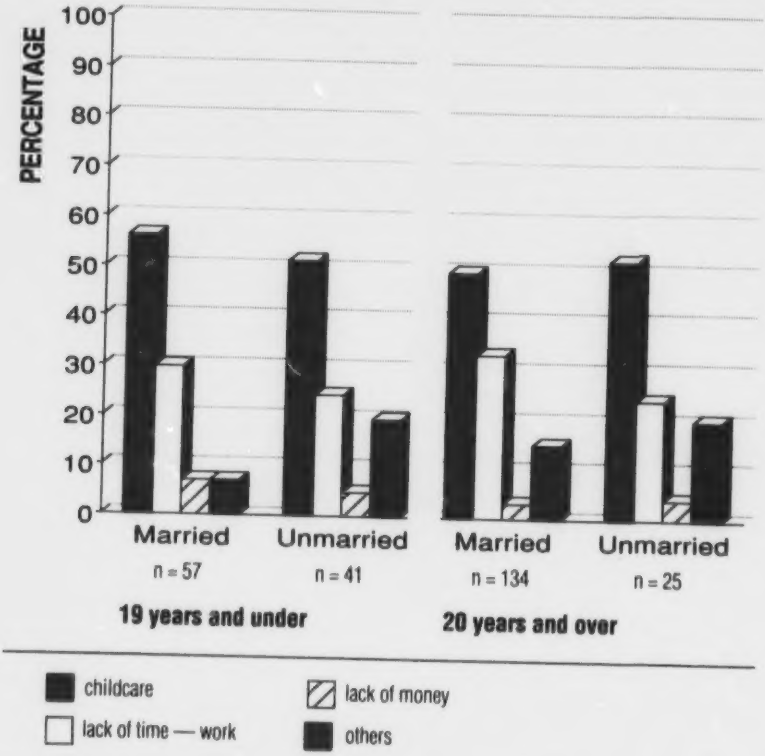


In general, the answers vary little between the groups with the exception of lack of money being a considerable handicap for unmarried mothers. Rather, restrictions of leisure time seem to be related simply to being mothers and having to manage the competing demands on their time and childcaring responsibilities (see Figure 8.2).

Although these findings give some support to the conclusions drawn from time-budget studies that some mothers operate within severe time constraints, the more limiting factors appear to be childcare responsibilities and money.

FIGURE 8.2

Reasons Why it is Difficult for Leisure Pursuits at Home, by Mother's Original Age and Marital Status



Time to Themselves

A further question concerned whether the mothers needed more time to themselves. Although isolation and a lack of participation in social networks can be problematic, it is equally problematic if people have no time to themselves.

The young mothers' responses indicate that this is less of a problem than for the older mothers. Just over half of the former group (52.7 percent) say they "never" or "not very often" need more time for themselves, whereas 42.8 percent of the older mothers give this response. More of the older mothers report it is sometimes a problem (46.1 percent) than do young mothers (35.9 percent), although all groups show similar percentages (9.3 percent to 12.8 percent) for whom time alone is a chronic problem.

In looking at the overall picture of the mothers' support networks and their community connections, the data indicate that the majority of mothers have a balance between having people they can call on for help, involvement in community and leisure activities on the one hand, and total immersion in demanding activities such that they have no time to themselves, on the other. As with all such generalizations, however, the circumstances of those who do not fit the general pattern should not be overlooked. For instance, in comparison with other groups of mothers, the older unmarried mothers are more likely to be caring for their children by themselves, have less secure networks of help, suffer more from loneliness, and have more restrictions on their ability to undertake leisure activities outside the home.

There is some evidence also that, as discussed by previous researchers, motherhood is such an onerous and demanding job that the mothers' own well-being may be adversely affected. Thus, some mothers simply do not have the time for leisure activities or enough time by themselves to relax and unwind.

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9 PERCEPTIONS OF LIFE

Background Literature

The previous Chapter examined the social support available to mothers and the social network to which they belonged. Such arrangements are vital to the quality of care available for the children, through the direct provision of care and, more indirectly, through a sense of help and support being available to the mothers. A mother's sense of personal well-being is important for herself and undoubtedly affects how she deals with her child and with other aspects of her life.

The well-being of mothers involves a complex mix of factors, including financial security, personal health, housing conditions and access to transportation, as well as relations with others in the family and the wider community. The mothers' sense of well-being is, of course, addressing the age-old question of whether people are happy or satisfied with their lives.

Recently social scientists have explored this question by looking at the levels of satisfaction people report about their lives as a whole and about various components, particularly employment and marriage but also finances, education, recreation, interpersonal relations and health.[1] However, because overall life satisfaction has received less attention than studies of specific components, the relationship between these individual components and overall satisfaction is not as well understood.

The literature on satisfaction, while extensive, still revolves at a theoretical level around comparisons between current situations and preferred situations. As Campbell stated, "Satisfaction is the difference between an individual's perceived reality of the current situation and aspirations concerning the domain."[2] Recent work has focused on the comparisons people make, since the group people compare themselves to is key to their satisfaction or dissatisfaction. It has been suggested that there are seven different types of comparisons, including comparisons to a specific reference group, to some notion of what one deserves, to the best one has ever had, and to what one needs.[3] Because individuals do make different comparisons it is possible for people in objectively similar circumstances to have quite different levels of satisfaction and vice versa.

Simply knowing a person's circumstances, such as their income level, does not necessarily allow the prediction of satisfaction levels. Generally people's satisfaction with life appears to be related to such dimensions as their health and marital status, age, income and educational attainment. People in good health, for example, are more likely to be satisfied with their lives, as are older and married people.[4]

It is evident that some levels of satisfaction vary by life-cycle stage. Marital satisfaction, for one, follows a similar pattern to the family cycle. From a high at the beginning of marriage, satisfaction declines, particularly after the birth of the first child. Satisfaction continues at this level during the childrearing years and into the middle stages of married life. Once the children have left home marital satisfaction increases and continues to increase into the later stages of marriage.[5]

Marital satisfaction is a particularly complex factor: it clearly varies throughout the life cycle and probably has different meanings for wives than husbands. Jesse Bernard brought these issues to the fore in her discussion of "his" and "her" marriages where she documented the more harmful psychological consequences of marriage for women.[6] Although Bernard's study was published in 1972, the conclusions she draws appear as valid today as then. While the common perception is that women see marriage as a more important part of their lives than men and derive greater benefits from it, this may bear little relationship to reality, which may result in both advantages and disadvantages for women. Certainly the high rates of psychological problems reported for married women, especially full-time housewives, compared with married men and single women suggest that many married women encounter significant difficulties.

Bernard's explanations with respect to the lack of status attached to being a housewife, the loss of some independence when women move from the labour force to full-time housework and the repetitive and isolating nature of the work, are still valid today. For married women in the labour force, on the other hand, the stress associated with meeting work responsibilities and the responsibilities attached to the home are very real.[7]

Indeed, time-budget studies, which analyze people's use of time, have documented — in virtually all industrialized countries — the double burden of married women in the labour force.[8] Although greater equality between married women and men is now assumed with respect to responsibilities both inside and outside the home, actual practice has not caught up with the assumption. Married, employed men and homemakers share similar patterns of time-use over the course of a week: the hours devoted to work, leisure-time pursuits and personal care are balanced, with time available for these activities each day and with weekends largely devoted to non-work activities.

But for married women in the labour force, particularly those with children, time-use is quite different: they typically have less leisure time during the week and use much of the weekend to catch up on household chores, in addition to managing their responsibilities in the paid labour force. This double burden, experienced by many married women, results largely from the fact that most married men do not contribute equally to the running of the household. Even the addition of children to the household produces little change; the woman continues to be responsible for most household tasks. It is not surprising, therefore, that a great many of women's leisure pursuits revolve around the home. Such activities as watching television and having friends and family visit are far more common than belonging to organizations, playing sports or attending out-of-home functions, or activities that involve more organized time commitments, as documented in the previous chapter.[9]

Although research indicates that marriage is difficult for many women, married women typically rate themselves as happy. Indeed, although wives report more marital stress than their husbands, a high percentage of married women report they, and their marriages, are happy.[10]

The many studies on "satisfaction with life" suggest that researchers are actually dealing with fundamental assessments of the quality of life experienced by segments of society and not just fleeting emotions. Canadians generally report being very satisfied with their lives overall and on specific dimensions. A national study conducted in the 1970s at York University in Toronto asked Canadians to indicate their satisfaction in 16 different areas and with life as a whole.[11] The researchers found that on all these items only a minority of Canadians said they were neutral or dissatisfied. The majority found their circumstances satisfactory, often better.

Results

The mothers in this study were asked to assess their current circumstances in three different ways. First, to determine their satisfaction with various aspects of their lives, the mothers were asked to indicate their level of satisfaction on 12 dimensions: health, finances, family relationships (excluding husbands and children), employment, friendships, housing, husband, recreation, religion, self-esteem, transportation and education.

The mothers were also asked to rate their life as a whole. For each of these questions the mothers rated their satisfaction on a seven-point scale according to the following categories: terrible, very dissatisfied, dissatisfied, mixed, satisfied, very satisfied and delightful. Because so few mothers indicated that they were dissatisfied, the categories were collapsed for analysis: the "terrible", "very dissatisfied", and "dissatisfied" answers are reported in this Chapter as "dissatisfied", the "mixed" responses remain unchanged, and the three "satisfied" responses are collapsed into one category labelled "satisfied."

A second set of questions dealt with the mother's assessment of changes in her circumstances over the past 10 years. Using the same 12 dimensions and the one summary dimension mentioned above, the mothers were asked to compare their current circumstances with those at the time their first child was born. The mothers indicated whether their current position was "a lot worse", "somewhat worse", "about the same", "somewhat better" or "a lot better." As in the previous question, so few mothers gave negative answers that these categories were collapsed into three: "a lot worse" and "somewhat worse" into a single category labelled "worse"; "about the same" remains as is; and the positive categories, "better" and "a lot better" became one category called "better".

A third question, designed to give an overall measure of the mothers' happiness, used the Memorial University of Newfoundland Scale of Happiness (MUNSH).[12] Here mothers were asked to indicate whether certain statements applied to their current circumstances or their general life experience. The statements included such items as, "feeling particularly content with life", "feeling depressed or unhappy", "this is the dreariest time of life", and "life is hard most of the time".

Current Satisfaction

Looking at the levels of satisfaction mothers expressed with their lives, the overall conclusion is that the majority of mothers are satisfied (see Table 9.1). For all the dimensions there is only one item on which a majority of one group of mothers is not satisfied. This is found for the unmarried mothers with respect to education; only 40.3 percent of them are satisfied, 28.2 percent express mixed feelings and 31.5 percent are dissatisfied. That levels of satisfaction are generally high is further indicated by the fact that at least 70 percent of the mothers say they are satisfied with aspects of their lives on all dimensions, except recreation

TABLE 9.1

Percentages of Mothers Indicating Dissatisfaction, Mixed, or Satisfaction Responses on 13 Life Dimensions by Mother's Original Marital Status

	Married			n	Unmarried			n
	1	2	3		1	2	3	
Health	5.5	13.3	81.2	(346)	6.9	15.3	77.8	(216)
Finances	12.7	16.2	71.1	(346)	25.5	23.1	51.4[a]	(216)
Family	3.2	12.7	84.1	(346)	6.0	8.3	85.4	(216)
Employment	8.5	21.4	70.1	(201)	9.4	16.0	74.5	(106)
Friends	1.7	3.2	95.1	(346)	2.3	7.0	90.7	(214)
Housing	4.0	9.0	87.0	(346)	7.9	13.9	78.2[b]	(216)
Husband	0.9	5.6	93.4	(320)	1.3	5.4	93.3	(149)
Recreation	14.5	20.9	64.6	(345)	15.4	19.2	65.4	(214)
Religion	5.4	17.6	77.1	(336)	4.0	24.3	71.8	(202)
Self Esteem	4.9	18.0	77.1	(345)	5.1	21.3	73.6	(216)
Transportation	7.5	9.8	82.7	(346)	13.0	8.8	78.2	(216)
Education	12.1	17.6	70.2	(346)	31.5	28.2	40.3[c]	(216)
Life as a Whole	1.2	10.7	88.2	(346)	4.2	12.0	83.8[d]	(216)

1 dissatisfied
2 mixed
3 satisfied

[a] Cramer's V = .20, Significance of Chi-square < .0001
[b] Cramer's V = .11, Significance of Chi-square < .05
[c] Cramer's V = .30, Significance of Chi-square < .0001
[d] Cramer's V = .10, Significance of Chi-square < .05

for both married and unmarried groups (64.6 percent and 65.4 percent), finances for the unmarried mothers (51.4 percent), and education, as already mentioned, for the unmarried mothers (40.3 percent). Table 9.1 shows that on some dimensions — for example, husbands, family, friendships, and life as a whole — few mothers have mixed feelings and virtually no one is dissatisfied.

Table 9.1 also shows that although many of the comparisons between married and unmarried mothers are not statistically significant, in nine of the 13 comparisons the married mothers have higher levels of satisfaction and lower levels of dissatisfaction. With respect to husbands, the ratings for the unmarried and married mothers are the same, while for family, employment and recreation, a slightly higher percentage of unmarried mothers report being satisfied.

Significant differences occur on finances, housing, education and life as a whole. On each of these dimensions, the unmarried mothers show less satisfaction with their lives than the married mothers. The differences on finances and education are most significant. These are the factors on which the unmarried mothers indicated their lowest levels of satisfaction with only 51.4 percent and 40.3 percent saying they are satisfied with their finances and education, respectively. As mentioned earlier, these figures compare with the rating on all the other dimensions (except recreation) where at least 70 percent of the mothers are satisfied.

By analyzing the effect of original age and marital status on levels of satisfaction, however, the findings become more complex (see Table 9.2). As this Table shows the majority of mothers are satisfied with their lives irrespective of their original age and marital status. In only one instance, that of young unmarried mothers and education, is a majority of mothers not satisfied with their circumstances and on only one dimension, recreation, do less than 70 percent of each of the four groups report satisfaction. Apart from recreation, all young mothers report lower levels of satisfaction with finances and education. These young married mothers also report the lowest level of satisfaction with respect to employment.

For the older married mothers satisfaction with recreation is the only dimension on which at least 70 percent are not satisfied. For the older unmarried mothers however, only 51.7 percent and 52 percent are satisfied with their finances and education, respectively, and just under 70 percent were not satisfied with their recreation.

Levels of dissatisfaction are typically low across most dimensions. Education is a notable exception for the unmarried mothers where close to a third in both age groups are dissatisfied. Finances are also a source of dissatisfaction for the same groups; 22 percent of the younger unmarried mothers express dissatisfaction and 32 percent of the older unmarried mothers. Considering just those dimensions where at least 10 percent of the mothers indicated dissatisfaction, it is noticeable that a number of items are common to all groups, specifically education, finances and recreation. All mothers, except the older married mothers, also have relatively high levels of dissatisfaction with transportation, while employment is a major source of dissatisfaction for both the young married and the older unmarried mothers.

TABLE 9 2

Percentages of Mothers Aged 19 and Under Indicating Dissatisfaction, Mixed or Satisfaction Responses on 13 Life Dimensions by Mother's Original Marital Status

	Married			n	Unmarried			n
	1	2	3		1	2	3	
Health	9.6	15.4	75.0	(104)	5.7	14.9	79.4	(141)
Finances	18.3	17.3	64.4	(104)	22.0	26.2	51.8	(141)
Family	4.8	19.2	76.0	(104)	7.1	8.5	84.4[a]	(141)
Employment	19.1	27.7	53.2	(47)	4.5	19.7	75.8[b]	(66)
Friends	1.0	1.9	97.1	(104)	2.8	7.8	89.4	(141)
Housing	5.8	11.5	82.7	(104)	7.8	12.8	79.4	(141)
Husband	0.0	2.2	97.8	(93)	0.9	2.8	96.2	(106)
Recreation	13.5	25.0	61.5	(104)	14.4	22.3	63.3	(139)
Religion	7.1	17.3	75.5	(98)	3.8	25.4	70.8	(103)
Self Esteem	3.8	18.3	77.9	(104)	7.1	18.4	74.5	(141)
Transportation	11.5	7.7	80.8	(104)	12.8	9.9	77.3	(141)
Education	17.3	19.2	63.5	(104)	32.6	33.3	34.0[c]	(141)
Life as a Whole	1.0	9.6	89.4	(104)	3.5	12.1	84.4	(141)

1 dissatisfied
2 mixed
3 satisfied

---

[a] Cramer's V = .16, Significance of Chi-square < .05
[b] Cramer's V = .27, Significance of Chi-square < .05
[c] Cramer's V = .29, Significance of Chi-square < .001

CONTINUED

Between the two groups of young mothers, it is the married mothers who show higher levels of satisfaction on nine of the 13 dimensions; the exceptions being health, recreation, family and employment. These latter two factors, along with education, reveal significant differences between the two groups. On the family and employment dimensions, however, the unmarried mothers have higher levels of satisfaction (84.4 percent and 75.8 percent) than the married mothers (76 percent and 53.2 percent). On the education dimension, 63.5 percent of the married mothers indicated satisfaction versus 34 percent of the unmarried mothers.

The older mothers show both similarities and differences compared to the young mothers. As with the young group, the married mothers show higher levels of satisfaction than the unmarried mothers, this being the case on 11 of the dimensions.

Table 9.2 continued

Percentages of Mothers Aged 20 and Over Indicating Dissatisfaction, Mixed, or Satisfaction Responses on 13 Life Dimensions by Mother's Original Marital Status

	Married			n	Unmarried			n
	1	2	3		1	2	3	
Health	3.7	12.4	83.9	(242)	9.3	16.0	74.7	(75)
Finances	10.3	15.7	74.0	(242)	32.0	17.3	51.7[a]	(75)
Family	2.5	9.9	87.6	(242)	4.0	8.0	88.0	(75)
Employment	5.2	19.5	75.3	(154)	17.5	10.0	72.5[b]	(40)
Friends	2.1	3.7	94.3	(242)	1.4	5.5	93.2	(73)
Housing	3.3	7.9	88.8	(242)	8.0	16.0	76.0[c]	(75)
Husband	1.3	7.0	91.6	(227)	2.3	11.6	86.0	(43)
Recreation	14.9	19.1	66.0	(241)	17.3	13.3	69.3	(75)
Religion	4.6	17.6	77.7	(238)	4.2	22.2	73.6	(72)
Self Esteem	5.4	17.8	76.8	(241)	1.3	26.7	72.0	(75)
Transportation	5.8	10.7	83.5	(242)	13.3	6.7	80.0	(75)
Education	9.9	16.9	73.1	(242)	29.3	18.7	52.0[d]	(75)
Life as a Whole	1.2	11.2	87.6	(242)	5.3	12.0	82.7	(75)

1 dissatisfied
2 mixed
3 satisfied

[a]. Cramer's V = .26, Significance of Chi-square < .0001
[b]. Cramer's V = .20, Significance of Chi-square < .05
[c]. Cramer's V = .15, Significance of Chi-square < .05
[d]. Cramer's V = .24, Significance of Chi-square < .0001

They have only a 0.4 percent difference on the family dimension, and they are less satisfied than the unmarried mothers in only one area, recreation. Only four of the comparisons, however, were statistically significant, with a fifth approaching significance. The four significant differences occur for finances, employment, housing and education, with transportation coming close to being significant.

The one dimension that stands out is education. This dimension is rated significantly differently by the married and unmarried mothers irrespective of their age and consistently shows that unmarried mothers are less satisfied than married mothers. Satisfaction with employment did not appear to be significantly different in comparisons of married and unmarried mothers because the relationship changes depending on the age of the mothers. Thus, young married mothers and older unmarried mothers are significantly less satisfied with their employment than their respective counterparts. Ratings of finances and housing are significantly different only for the older women, revealing higher levels of satisfaction for the married mothers. Conversely, the younger mothers' ratings of satisfaction on the family dimension are significantly different: unmarried mothers show higher levels of satisfaction. Satisfaction with life shows little variation between the groups of mothers once the mother's age and marital status are considered together.

These findings suggest that the relationship between age and marital status and levels of satisfaction is complex, particularly for the young women. For the older women, the relationships that are significantly different are consistent in that the unmarried mothers are less satisfied. Young women, however, show this pattern only with respect to education. On the family and employment dimensions, it is the married mothers who are less satisfied. Being an unmarried mother, therefore, can be expected to have negative outcomes for older women, while for teenage mothers being married or unmarried has no clear effect on satisfaction with one's situation.

Although there are some notable differences in the levels of satisfaction that mothers express on the dimensions included in this study, the overall findings suggest that a high percentage of mothers are satisfied with their lives. As indicated at the beginning of this Chapter, Canadians in general express high levels of satisfaction with their lives. In comparing the results of the York survey with the results of this study, there are considerable similarities in the rank ordering of the dimensions in terms of the percentage of respondents indicating satisfaction (see Table 9.3).

Thus, in this study the dimensions on which the highest percentage of mothers said they were satisfied were friends, husbands, family and life as a whole. The comparable data for the Canadian population show that marriage, friends and life as a whole are the dimensions on which the largest majority of Canadians are satisfied. The major differences between the two samples occur with respect to employment and recreation, which the mothers indicated are less satisfying than the general population, and health, where more mothers indicated satisfaction than the general population.

TABLE 9.3

Rank Ordering of Dimensions by Percentage of Respondents Rating "Satisfying"

Mothers and Children Survey		York Survey
Married Mothers	**Unmarried Mothers**	**General Population**
Friends	Husband	Marriage
Husband	Friends	Friends
Life as a whole	Family	Life as a whole
Housing	Life as a whole	Jobs
Family	Housing	Housing
Transportation	Transportation	Leisure
Health	Health	Health
Religion	Employment	Finances
Self-esteem	Self-esteem	Education
Finances	Religion	
Education	Recreation	
Employment	Finances	
Recreation	Education	

The first finding may well be explained by the fact that as women, and relatively young women, living in Nova Scotia, their employment opportunities are more circumscribed than those of the general population. Also, as mothers with young children, it is evident that these women have limited time and resources for recreational activities, leading perhaps to less satisfaction with this area of their lives. Conversely, as the majority of the mothers are in their late 20s to mid-30s health status is quite good in comparison with a sample of Canadians that includes all age groups. Perhaps the most reassuring factor, however, is that the mothers show such similarities in the dimensions that give them satisfaction with the Canadian population as a whole. This would suggest that mothers share in the common aspirations for a happy life.

Changes Over Ten Years

The levels of satisfaction that the mothers indicated are related to the changes in their circumstances during the past 10 years. In looking at how the mothers assess these changes, however, it is important to remember that although conditions may be reported to have improved or become worse, this is not an objective assessment. Rather the mothers are reporting how they see their circumstances as changing over 10 years. Reporting very considerable improvements does not necessarily mean that the family is in good circumstances. Nor does the reported worsening of conditions mean that a family is in straightened circumstances. All that is indicated is the relative circumstances of 1978/79 and 1988/89.

Table 9.4 shows the changes in the mothers circumstances by comparing the married and unmarried mothers. On the overall dimension, it can be seen that circumstances have improved for at least three-quarters of the mothers. On the individual dimensions a majority of mothers experienced improvement in housing, finances and employment. A majority

TABLE 9.4

Percentage of Mothers Indicating Worse, Same, or Improved Responses on 13 Life Dimensions by Mother's Original Marital Status

	Married			n	Unmarried			n
	1	2	3		1	2	3	
Health	18.6	69.6	11.9	(345)	19.9	59.7	20.4[a]	(216)
Finances	15.3	22.3	62.4	(346)	14.4	19.4	66.2	(216)
Family	6.4	76.3	17.3	(346)	4.2	63.4	32.4[b]	(216)
Employment	8.6	29.2	62.2	(209)	7.5	19.6	72.9	(107)
Friends	7.8	61.6	30.6	(346)	3.7	66.2	30.1	(216)
Housing	2.9	29.8	67.3	(346)	7.4	24.2	68.4[c]	(215)
Husband	6.2	49.5	44.3	(323)	2.2	21.7	76.1[d]	(138)
Recreation	17.3	45.4	37.3	(346)	9.3	66.5	24.2[e]	(215)
Religion	3.6	77.8	18.6	(338)	4.9	77.6	17.6	(205)
Self Esteem	6.4	44.2	49.4	(346)	8.8	37.5	53.7	(216)
Transportation	6.1	61.6	32.4	(346)	6.5	44.2	49.3[f]	(215)
Education	1.4	75.4	23.2	(345)	1.9	67.9	30.2	(215)
Life as a Whole	4.3	20.9	74.8	(345)	4.6	11.6	83.8[g]	(216)

1 worse
2 same
3 improved

[a]. Cramer's V = .12, Significance of Chi-Square < .05
[b]. Cramer's V = .17, Significance of Chi-Square < .001
[c]. Cramer's V = .11, Significance of Chi-Square < .05
[d]. Cramer's V = .29, Significance of Chi-Square < .0001
[e]. Cramer's V = .20, Significance of Chi-Square < .0001
[f]. Cramer's V = .17, Significance of Chi-Square < .001
[g]. Cramer's V = .11, Significance of Chi-Square < .05

of the unmarried mothers also indicated improved circumstances in relation to their husbands and to their self-esteem. On the remaining dimensions a majority of married mothers indicated that their circumstances are the same as they were 10 years ago, with the exception of husbands, recreation and self-esteem. Here, the married mothers are more evenly divided between those who view their circumstances as unchanged and those who have experienced improvements. A similar pattern is evident for the unmarried mothers where on six dimensions the majority find life unchanged, on the five dimensions mentioned there is substantial improvement, and on one dimension — transportation — the responses are quite evenly split between the "improved" and the "same" categories.

In general, the circumstances of the unmarried mothers have improved to a greater degree than those of the married mothers. This is the case for all but three of the 13 dimensions. Married mothers indicated higher levels of improvement on recreation and religion, and, with respect to friends, both groups of mothers give the same response. That the unmarried mothers' lives have improved to such an extent is reassuring in that they were typically in more difficult circumstances than their married counterparts at the time their first child was born. In fact, for many of the unmarried mothers life would be seen to improve as they gained their independence from their families, got married and established their own lives. Yet despite this perception of improved circumstances, the majority of unmarried mothers report that life is the same on six dimensions.

In comparisons between the married and unmarried mothers, there are seven dimensions on which the differences between the two groups are statistically significant. On health, family, housing, husband, transportation and life as a whole, a higher percentage of unmarried mothers report improvements, and the data are significantly different from those of the married mothers. Although these improvements are evident for the unmarried mothers, it is also the case that a greater proportion of these mothers have experienced worsened conditions on health and housing compared to married mothers. With respect to recreation, the seventh dimension on which there is a significant difference, the married mothers have both a higher rate of improvement and a higher rate of worsened circumstances than the unmarried mothers.

When one looks at the changes that have occurred in relation to the mothers' original age and marital status, differences between the young and older groups occur (see Table 9.5). A

TABLE 9.5

Percentage of Mothers Aged 19 and Under Indicating Worse, Same, or Improved Responses on 13 Life Dimensions by Mother's Original Marital Status

	Married			n	Unmarried			n
	1	2	3		1	2	3	
Health	26.9	65.4	7.7	(104)	17.7	63.1	19.1^{a}	(141)
Finances	18.3	14.4	67.3	(104)	12.1	16.3	71.6	(141)
Family	7.7	69.2	23.1	(104)	5.7	61.7	32.6	(141)
Employment	11.3	32.1	56.6	(53)	5.8	17.4	76.8^{b}	(69)
Friends	3.8	63.5	32.7	(104)	3.5	64.5	31.9	(141)
Housing	1.9	23.1	75.0	(104)	7.8	21.3	70.9	(141)
Husband	4.1	43.3	52.6	(97)	1.0	17.5	81.4^{c}	(97)
Recreation	9.6	55.8	34.6	(104)	11.4	63.6	25.0	(140)
Religion	3.0	80.8	16.2	(99)	5.3	78.0	16.7	(132)
Self Esteem	2.9	42.3	54.8	(104)	7.8	35.5	56.7	(141)
Transportation	2.9	58.7	38.5	(104)	4.3	39.0	56.7^{d}	(141)
Education	0.0	69.2	30.8	(104)	2.8	66.0	31.2	(141)
Life as a Whole	2.9	18.3	78.8	(104)	3.5	9.2	87.2	(141)

1 worse 2 same 3 improved

^{a} Cramer's V = .17, Significance of Chi-Square < .05
^{b} Cramer's V = .21, Significance of Chi-Square < .05
^{c} Cramer's V = .30, Significance of Chi-Square < .0001
^{d} Cramer's V = .19, Significance of Chi-Square < .01

Percentage of Mothers Aged 20 and Over Indicating Worse, Same, or Improved Responses on 13 Life Dimensions by Mother's Original Marital Status

	Married			n	Unmarried			n
	1	2	3		1	2	3	
Health	14.9	71.4	13.7	(241)	24.0	53.3	22.7^{a}	(75)
Finances	14.0	25.6	60.3	(242)	18.7	25.3	56.0	(75)
Family	5.8	79.3	14.9	(242)	1.3	66.7	32.0^{b}	(75)
Employment	7.7	28.2	64.1	(156)	10.5	23.7	65.8	(38)
Friends	9.5	60.7	29.8	(242)	4.0	69.3	26.7	(75)
Housing	3.3	32.6	64.0	(242)	6.8	29.7	63.5	(74)
Husband	7.1	52.2	40.7	(226)	4.9	31.7	63.4^{c}	(41)
Recreation	20.7	40.9	38.4	(242)	5.3	72.0	22.7^{d}	(75)
Religion	3.8	76.6	19.7	(239)	4.1	76.7	19.2	(73)
Self Esteem	7.9	45.0	47.1	(242)	10.7	41.3	48.0	(75)
Transportation	7.4	62.8	29.8	(242)	10.8	54.1	35.1	(74)
Education	2.1	78.0	19.9	(241)	0.0	71.6	28.4	(74)
Life as a Whole	5.0	22.0	73.0	(241)	6.7	16.0	77.3	(75)

1 worse 2 same 3 improved

^{a} Cramer's V = .16, Significance of Chi-Square < .05
^{b} Cramer's V = .19, Significance of Chi-Square < .01
^{c} Cramer's V = .16, Significance of Chi-Square < .05
^{d} Cramer's V = .27, Significance of Chi-Square < .0001

majority of both the young married and the young unmarried mothers indicated improved circumstances with respect to finances, employment, housing, husband, self-esteem and life as a whole. In addition, the majority of unmarried mothers report improvements in their transportation. In comparison, most of the older mothers say their circumstances have improved in relation to finances, employment, housing and life as a whole, and for the older unmarried mothers similar improvements are also seen for husbands. These figures indicate that circumstances have improved most for the young unmarried mothers, followed by the young married, the older unmarried, and then the older married.

Although improvements for some of the mothers are evident, it is also the case that conditions have worsened for other mothers, suggesting that changes in circumstances are by no means only one way. On the majority of the dimensions it is a small percentage of mothers who report worsened conditions, irrespective of their age and marital status.

All groups of mothers, however, have at least 12 percent of the respondents indicating that their health and financial circumstances are worse now than 10 years ago. A higher percentage of mothers report worsened health than worsened finances, with the young married mothers and the older unmarried mothers having particularly high rates of worsened circumstances on the health dimension. Approximately a quarter of each group indicate this negative change. With respect to the other dimensions where at least 10 percent of the mothers indicated worsened circumstances, there is no clear pattern of responses. All but the older unmarried mothers show at least 10 percent of the responses as negative on three dimensions, including health and finances. For the young married mothers the third dimension is employment and for the young unmarried and older married mothers it is recreation. The older unmarried mothers have at least 10 percent negative responses on five dimensions: health, finances, employment, self-esteem and transportation. Such findings suggest that although conditions have stayed the same or improved for a large majority of the mothers, there is a small but significant group for whom life has become more difficult.

There are only two instances where there are no mothers reporting worsened conditions — education for young married and older unmarried mothers. In all other instances some mothers report more difficulties now than in the past.

Responses on health, employment, husband and transportation dimensions show significant differences for the young married compared to the young unmarried mothers. In each of these instances, the unmarried mothers have higher rates of improvement than the married mothers. The older mothers' responses are significantly different on finances, family, husband and recreation. While the first three dimensions follow the same pattern as that of the young mothers, on the recreation dimension it is the married mothers who have the highest rate of improvement. These results indicate that improvements related to husbands is the only dimension that shows significant differences for both the younger and older mothers. The six other dimensions where there are significant differences occur for the older mothers or the younger mothers but not both.

This suggests that the relationship between age and marital status and changes in the mothers' lives is complex and that the changes are not easily predicted on the basis of the mothers' original marital status and age. Nevertheless, the higher levels of improvement for the unmarried mothers, in general, likely demonstrate the more difficult circumstances of these mothers at the time of the birth of their first child and the catch-up that is necessary to bring these mothers closer to the norm of families with young children. As earlier chapters have demonstrated, however, many of the unmarried mothers do not obtain the same level of comfort and stability experienced by the older married mothers. Despite notable improvements in their social and economic circumstances, many of the mothers still experience considerable hardship.

Happiness

The final measure of mothers' well-being was attained through the mothers' responses on the MUNSH scale. This scale is designed to give an overall assessment of one's happiness and allows for comparison between different groups. In looking at the mothers in this study, therefore, the focus was on learning whether there were differences in the levels of happiness reported by those mothers who were married as opposed to unmarried, and whether age made a difference. The scores indicate that the mothers, on average, are within the range where people are considered to be happy with their lives, although individual scores cover the entire range of possible scores further indicating that in each group, some mothers are extremely happy and others are extremely unhappy.

When the mothers are considered according to marital status and age, it is apparent that age does not affect their level of happiness but marital status does. Those mothers who were originally unmarried report somewhat lower levels of happiness on the MUNSH scale than those who were originally married. The group averages are still within the range where people would be considered happy, but the married mothers report significantly higher levels ($t = 3.55$, $p < .0001$, $n = 502$) (see Table 9.6).

TABLE 9.6

Mothers' Level of Happiness on MUNSH Scale

Original Age and Marital Status of Mothers	Mean Score on Munsh Scale	(n)
Young married	10.17	(104)
Older married	11.11	(242)
Young unmarried	8.56	(141)
Older unmarried	7.37	(75)

In summary, the majority of mothers in this study have high levels of satisfaction on specific dimensions of their lives and with their lives as a whole. There are, however, some variations in levels of satisfaction. These are often related to the mothers' original marital status such that unmarried mothers are somewhat less satisfied with their situation than married mothers. The levels of satisfaction reported by the mothers can be related to some of the findings reported in the earlier chapter on social relations. For instance, the restrictions reported on leisure activities are reflective of the relative lack of satisfaction with this area of their lives. Lack of money constrains the recreational pursuits of unmarried mothers in particular, and these mothers report less satisfaction with their financial situation, which is in turn related to dissatisfaction with educational attainment and, for some mothers, with employment. The assessments reported by the mothers are again supported by the discussion of these issues in earlier chapters.

Although the unmarried mothers report considerable improvement in their lives, they nevertheless do not reach the same levels of satisfaction on many dimensions or on overall happiness as the married mothers. These data suggest that the older married mothers lead the most satisfying lives and have done so over the past 10 years. Other mothers, either because they were young or unmarried at the time their first child was born, are faced with lives that, while satisfying for many, are nonetheless more difficult.

Footnotes

1. Michalos, Alex. "What Makes People Happy?" Paper presented at the Conference on Quality of Life, Oslo, October 1986.

2. Campbell, Alexander, P.E. Converse, and W.L. Rodgers. *The Quality of American Life*. New York: Russell Sage Foundation, 1976.

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10 CHILDCARE AND MOTHER-CHILD INTERACTIONS

Background Literature

Chapter 8 focused on how mothers attained support from relatives and friends to reduce the negative effects of social isolation and to seek advice on raising a child appropriately. Equally important, however, is the fact that mothers can also ask relatives and friends to actively assist with childcare.

This Chapter discusses who looks after the children; the patterns of childcare in relation to the mothers' support networks; and the patterns of interaction between mothers and their children. There is also a focus on the children and some of the consequences for them of having been born into a particular family type. This addresses, in part, the socialization of the children as influenced by the factors discussed in this Chapter.

Although members of social networks offer important assistance to mothers with young children by giving advice and encouragement and providing feedback on how the mother and child are progressing, the most tangible assistance comes from taking care of the child to allow a mother, for example, time to pursue social and leisure activities, or to enable the mother to participate in the labour force. Either way, family and friends are often a critical source of help and undoubtedly important figures in the child's development.

While the less extensive family networks and geographic mobility of contemporary society frequently mean that many mothers cannot rely exclusively on the family for assistance, the family can still be an important source of help. Although it is common to hear how families today assume less responsibility for their members than in the past, it is not clear that when it is possible to help, families do so to a lesser extent than previously.[1]

The studies referenced in Chapter 8 are of equal relevance here in that they discuss the quality of care given by young mothers. Virtually all the studies that look at how young unmarried mothers raise their children, however, have concentrated on the first few months or years of the child's life.[2] The demands placed on mothers clearly vary as the child grows older and begins school. Little is known though, about available family or social support as children become more independent and enter school. There is also no clear understanding of the consequences for children of experiencing different care-givers or different types of care.

One of the most contentious issues in recent years has been the provision of childcare by those other than parents. In particular there has been a debate about childcare centres and the hiring of care-givers who are not members of the family. While the debates often focus on who should provide the care, its availability and cost, the major question subsumed in this discussion is the quality of care received by the children.

The significant increase during the last 20 years in the labour force participation of women with young children has focused attention on how pre-school and young school-aged children are looked after. Indeed, this has brought about a significant change in family functioning: in many instances childcare is now shared with others outside the nuclear family. This has led to heated debate on both how the children of employed mothers are looked after and the quality of the care. In particular, the question of licensed daycare centres has received national attention throughout the '70s and '80s. The number of spaces available for children, the quality of the centres, and whose responsibility it is to provide this form of care have become focal points.

The answers to these questions are directly linked to the cost of daycare and who pays these costs.[3] It is apparent that given the number of spaces available in daycare centres and programs licensed by the provincial government and the number of children who could potentially be placed in these spaces, this form of childcare is used by only a minority of parents (see Tables 10.1 and 10.2).

For mothers in the labour force, for instance, the percentage of their children who could be in daycare centres in 1986 ranged from 2.9 percent to 22.4 percent, depending on the age of the children. Children between six and 13 years have the lowest level of accessibility (2.9 percent), whereas preschoolers have the highest (22.4 percent).

For employed mothers their children are most often cared for in the homes of relatives, friends and neighbours, or by women who care for children as a form of employment but who are not licensed. Less frequently children are cared for in their own homes by these care-givers. It is estimated that between 80 and 90 percent of children who require some form of childcare are looked after through this informal sector.[4]

Both types of informal childcare are unregulated; there are no requirements for the care-givers to have demonstrated knowledge or aptitude in dealing with young children, or for the care-givers to

TABLE 10.9

Distribution of Available Spaces in Licenced and Registered Daycare in Canada and in Nova Scotia, 1978-1987

	Licenced Daycare Spaces		Registered (Subsidized) Daycare Spaces	
Year	**Canada**	**Nova Scotia**	**Canada**	**Nova Scotia**
1978	74,516	4,660[1]	7,763	1,590[1]
1979	n/a[2]	6,793	n/a	2,100
1980	98,238	4,000[3]	10,903	2,100[3]
1981	n/a	4,300	n/a	2,338
1982	109,535	4,998	14,427	2,385
1983	n/a	5,200	n/a	2,426
1984	149,965	5,320	21,689	2,553
1985	169,751	5,540	22,623	2,631
1986	197,802	5,980	22,715	2,681
1987	n/a	7,773	n/a	2,806

Sources

Status of Day Care in Canada 1986, Health and Welfare Canada, page 5
Social Services in Nova Scotia, 1978, page 76
Social Services in Nova Scotia, 1979, page 78
Social Services in Nova Scotia, 1980, page 82
Social Services for Nova Scotians, 1982, page 60
Social Services for Nova Scotians, 1983, page 61
Social Services for Nova Scotians, 1984, page 55
Social Services for Nova Scotians, 1985, page 65
Social Services for Nova Scotians, 1986, page 66
Social Services for Nova Scotians, 1987, page 65

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[1] In the report, *Social Services in Nova Scotia, 1978 and Social Services in Nova Scotia, 1979*, licenced daycare spaces were labelled "day nurseries", and the registered daycare spaces are labelled "daycare services". In 1980, the Day Nursery Act and the Day Care Service Act were consolidated under the Day Care Act and the labels were changed.

[2] n/a = not available

[3] In the Nova Scotia Social Services' reports from 1980 and all subsequent years, "licensed daycare spaces" refers to all the spaces available in the province which are required to be licensed. "Registered daycare spaces" refers to non-profit centres which have provincially subsidized spaces.

provide a stimulating and safe environment. It seems to be assumed that because the care-givers often have had experience with children as mothers they are well able to care for others' children. While the women who care for children as a form of employment are financially compensated, pay to relatives, friends and neighbours is more variable. This may be an important factor

TABLE 10.2

The Number of Children, the Number of Daycare Spaces, and the Percentage of Children in Different Age Categories Served by the Centres

Age of Children	Number of Children	Number of Spaces[1]	Percentage of Children Served
0 to 17 months	308,864	13,969	4.5
18 to 36 months	300,108	27,605	9.2
3 to 6 years	601,136	134,826	22.4
6 to 13 years	1,515,380	44,117	2.9
Total	2,726,488	220,517	8.1

Source
Status of Day Care in Canada, 1986, Health and Welfare Canada, page 5

[1] "Number of Spaces" includes spaces available in both (licenced) day care centres and (registered) family day care homes.

in determining the sort of care that is sought since childcare costs may determine whether a mother is able to enter the labour force.

Reports on the quality of care, whether of licensed daycare or informal daycare, suggest that no single form of care is uniformly good but rather that good — and poor — quality care can be found in each sector. The poor quality of care relates partly to a lack of standards in the informal sector and a lax approach that may be taken towards ensuring that regulations are followed.[5]

Mothers report searching for good quality, affordable and dependable childcare. Unfortunately, these characteristics — combined with a scarcity of places — often seem to be mutually exclusive and mothers must settle for less desirable care. Poor quality care and frequent changes not only cause strain and worry for mothers but, equally importantly, raise questions about how well children will develop under these conditions. Evidence on the effects of out-of-home care on a child is often ambiguous because thorough and careful comparisons of different types of care are uncommon. It appears, however, that children in high-quality daycare centres do not suffer any adverse effects and many experience positive outcomes, especially children with disabilities and those from high-risk environments.[6]

For children in the informal-care sector the conclusions are less clear, as so few studies have examined this form of care. One study, conducted in Toronto in the late 1970s, suggests that homecare by women for whom this is paid employment may be less appropriate than the care in licensed centres. But, as with licensed centres, the quality is variable.[7] In terms of a child's development however, the need for high-quality care is fundamental.

The quality of care children receive in their own homes is also variable, depending on the circumstances of the household and the mother's understanding and belief in what is appropriate behaviour for both herself and her child. Psychologists, sociologists and child-development researchers, among others, have spent considerable time analyzing childrearing patterns and investigating the relationship between these patterns and a child's social and intellectual development.[8] Consistent relationships are difficult to document because the way children are reared changes from one generation to the next, and also because it is difficult to separate the effects of parents' beliefs and behaviour from the effects of school, peer groups and the mass media.

Early studies concluded that "permissive" mothers — mothers who did not impose specific time schedules on their children or who were not exacting disciplinarians — tended to foster a lack of self-control, impulsiveness and hostility in their children.[9] Current approaches to childrearing suggest that the mother, or primary care-giver, should foster the child's development by providing an environment in which the child benefits from guided participatory involvement.

Such an approach requires the adult to guide the child through the problem-solving process with the child actively participating at a challenging, but supported and comfortable, level. The result is a well-rounded approach to environmental stimulation, language development, reading readiness, socialization and self-confidence.[10] Given concerns about the educational level of some of the mothers it is possible that younger mothers or mothers with lower educational attainment may not have the resources to provide such a stimulating environment. However, the attainment of such an environment arises not just from skill but also from a philosophical approach and belief system not limited to specific categories of mothers. Thus, older married mothers may not present such an environment to their children any more than the young unmarried mothers because they do not believe in such an approach.

The nature and quality of mother-child interactions were explored in the mothers' interviews. The question involved 70 different statements about the type and style of behaviour management in the home. On each of the items the mothers were asked how often they behaved in a certain way, e.g., "frequently," "half the time," "seldom." Examples of the statements include:

> "I have strict, well-established rules for [child's name]."
>
> "I respect [child's name]'s opinions and encourage [him/her] to express them."
>
> "I threaten punishment and don't give it."
>
> "I set limits for activities to help [him/her] stay out of trouble".
>
> "I ignore misbehaviour."
>
> "I am aware of [his/her] need for privacy".

Results

Childcare

All mothers spend a considerable amount of time with their children, although the patterns are different for school days and weekends. On school days, the mothers are nearly evenly divided between those who spend five or fewer hours with their children (51 percent) and those who spend more time (49 percent). These figures change very little when the original marital status of the mother or her original age are considered. Overall, mothers are most likely to spend between four and six hours a day with their children on school days, averaging 5.25 hours. On weekends the patterns change, since two-thirds of the mothers spend more than eight hours with the children on Saturdays, and nearly three-quarters of them do so on Sundays. Again, original age and marital status do not significantly affect these figures.

On Saturdays, mothers average 10.2 hours with their children, and on Sundays 10.5 hours, doubling the average time spent with children on school days. The variation in time spent with the children between weekdays and weekends reflects the different pattern of activities characteristic of these days. The figures also suggest that Sunday is the most family-oriented day; this is when the highest percentage of mothers spend time with their children and the average contact hours are the highest.

Although the mothers spend considerable time with their children, most report that they are not solely responsible for childcare. As discussed in an earlier chapter, 82.6 percent of the mothers received some childcare assistance, typically from their husbands. For the married mothers, 93.2 percent receive help from husbands and for the originally unmarried mothers, 83.2 percent receive help from husbands. A number of mothers reported having more than one person assist with childrearing so that for the 441 mothers who have assistance, there are 564 helpers. In considering all helpers, husbands constitute 70.2 percent of the group; other relatives (most frequently the child's grandmothers) 14.4 percent; friends, baby sitters and formal childcare 12.9 percent; and the child's father (when he and the child's mother are not married) 2.5 percent. These figures confirm that while different groups of individuals do assist with raising children, family members are the most common source of help. Indeed, the assistance received from outside the family accounts for a relatively small percentage of all assistance.

After the mothers, husbands are the most important caregivers and they usually give assistance daily. Only 1.9 percent of husbands do not help on weekdays, 1.6 percent on Saturdays and 0.5 percent on Sundays. As with the mothers, however, considerably more time is spent with the children on weekends. On weekdays, husbands average 3.5 hours with the child, with only 3.8 percent spending seven or more hours with their child. On Saturdays, the average spent by husbands is 8.6 hours, and on Sundays 9.7 hours. In contrast with the weekdays, nearly two-thirds of the husbands (65.6 percent) spend seven hours or more with the children on Saturdays, and 80.1 percent do so on Sundays. The average time spent by husbands of married and originally-unmarried mothers varies little, averaging only six minutes difference on weekdays. On the weekends, the variation is somewhat larger. The husbands of married mothers average an extra 25 minutes on Saturdays, and 40 minutes on Sundays in comparison with the husbands of the originally unmarried mothers. Thus, on weekends, the husbands of the married mothers spend more time with the children than the husbands of the originally-unmarried mothers.

Taken together with the time mothers spend with their children, it is apparent that both mothers and their husbands share childcare responsibilities, at least at the level of being available to the child for a number of hours during the day. The mothers, however, give more time to these child-oriented responsibilities, especially on weekdays, while on weekends the difference between the mothers and their husbands in the hours spent with the children is noticeably reduced.

After husbands, the next largest category of helpers is the child's grandmother, who make up 9.8 percent of all helpers. Although the numbers are small, assistance from grandmothers shows a different pattern from husbands. On weekdays, 90.9 percent of grandmothers give assistance and do so for between one and 10 hours a day. On Saturdays 74.5 percent, and on Sundays 67.3 percent, help. Those who help on the weekends, however, as with mothers and husbands, do so for longer periods of time. Grandmothers average 3.2 hours of help on weekdays, 6.5 hours on Saturdays and 5.1 hours on Sundays. No grandmother gives more than 10 hours assistance on weekdays, but 30.9 percent do so on Saturdays and 21.8 percent on Sundays. Although grandmothers assist in only a small percentage of families, their assistance appears to be significant given the number of hours of care involved. Perhaps of equal significance is that this care is nearly always without financial cost; only 13 percent of the mothers who have this kind of help always pay for it. This contrasts with help from baby sitters and daycare, which is always paid for, and help from friends, for which the majority of mothers pay.

In looking further at the help mothers have used in caring for their children, excluding husbands, the time was divided into three periods: from the birth of the child until two years of age, from two years to starting school, and since the child started school. The results suggest that relatives are a major source of help and are the group most likely to be called upon. In each of these periods, close to 80 percent of the mothers received help from relatives.

The patterns for baby sitters and daycare are not as uniform. Baby sitters are used increasingly as the children grow older. For the first two years most mothers do not use baby sitters, but these figures increase from 42.9 percent to 58.0 percent when the children are between two and school age, and to 73.6 percent when the children are attending school. The reasons for these changes were not discussed with the mothers and could range from an inability to pay baby sitters to the belief that it is inappropriate to have very young children cared for by someone other than a member of the family.

Daycare use, on the other hand, reflects whether the mothers sought such organized assistance with childcare and the availability of spaces. It should be noted that this study incorporated a broad definition of daycare that included full-day and full-year organized programs for children, as well as nursery schools, pre- and post-school programs, and summer programs. When the children are between two years and school age, 50.6 percent of the mothers use daycare and this 'is the age group with the highest percentage of spaces. Only 4.4 percent of mothers with children under two use daycare and 8.2 percent of those with children attending school. Daycare, therefore, is an option for only a minority of parents when care for the children is considered over the 10-year period. The "other arrangements" made for the children include a variety of options ranging from live-in housekeepers, nursing care and foster care.

The extent to which the different categories of helpers (excluding husbands) are called upon varies, in many instances, depending upon the mother's original age and marital status. When the children are very young, unmarried mothers are more likely to receive assistance from relatives than married mothers, although in both categories the level of help is high — 86.6 percent and 76.2 percent, respectively (Phi = 0.11, Significance of Chi-square < 0.01, n = 501). These differences are not as pronounced when age is introduced as a control variable (see Table 10.3).

The trends are for young women to be more likely to receive help from relatives than older women and for the unmarried women, in each age category, to receive somewhat more assistance from relatives than the married women. In the 19 and under age group, 85.4 percent of the married mothers had help from relatives and 88.9 percent of the unmarried mothers. For the 20 and over group, the respective figures are 72.1 percent and 78.3 percent. In comparison with other categories of care-givers the children may be cared for by more than one relative. Overall, 65 percent of the mothers could call on at least two relatives for assistance, indicating that this network is more extensive than those of other care-givers.

Baby sitters were used by 52.1 percent of the married and 31.2 percent of the unmarried mothers when the children were under two years of age (Phi = 0.185, Significance of Chi-square < 0.0001, n = 501). The younger women, married and unmarried, used baby sitters to a similar extent (30.2 percent and 27.0 percent), but to a lesser degree than the older women. For the older women, there are significant differences. In the married category, 58.9 percent of the mothers used baby sitters, compared to only 38.3 percent of the unmarried mothers (Phi = 0.169, Significance of Chi-square < 0.01, n = 152). The older married women are in a unique position; they are the one group where a majority employed baby sitters for children under two. This supports the idea that the use of baby sitters is tied to having the necessary finances, since this group is the most economically advantaged. Young women in particular are less likely to use baby sitters and of those who do they appear dependent on one person. Although the figures vary only slightly,

TABLE 10.3

Percentage of Mothers Receiving Help with Caring for their Children from Relatives, Babysitters and Daycares, by Child's Age, and Mother's Original Age and Marital Status

CHILDREN AGED 0 — 2 YEARS

	19 years and under			20 years and over		
	Married	Unmarried	(n)	Married	Unmarried	(n)
Relatives	85.4	88.9	(194)	72.1	78.3	(205)
Babysitters	30.2	27.0	(63)	58.9	38.3[a]	(152)
Daycares	0.0	6.3	(8)	5.0	5.0	(14)
Other	2.1	0.8	(3)	0.0	1.7	(1)

CHILDREN AGE 2 UNTIL STARTING SCHOOL

	19 years and under			20 years and over		
	Married	Unmarried	(n)	Married	Unmarried	(n)
Relatives	91.7	88.1	(199)	75.3	83.3	(215)
Babysitters	51.0	45.2	(106)	67.6	61.7	(185)
Daycares	39.6	41.3	(90)	61.2	50.0	(164)
Other	0.0	0.0	(0)	0.0	0.0	(0)

CHILDREN SINCE STARTING SCHOOL

	19 years and under			20 years and over		
	Married	Unmarried	(n)	Married	Unmarried	(n)
Relatives	85.4	86.5	(191)	77.2	85.0	(220)
Babysitters	71.9	63.5	(149)	80.4	73.3	(220)
Daycares	4.2	10.3	(17)	7.3	13.3	(24)
Other	1.0	3.2	(5)	1.4	0.0	(3)

[a]. Phi = .16, Significance of Chi-square < .01

most of the young married women (63 percent) and most of the young unmarried women (64.7 percent) used only one baby sitter. For the older group, both married and unmarried mothers were evenly split (50 percent of each group) between those who had only one baby sitter and those who had two or more. For the married mothers, this may reflect the fact that they call on the services of a baby sitter to a greater extent than the other groups.

But even here, 83.5 percent of the mothers have employed only one or two people. The pattern for the older unmarried mothers is quite different; nearly one third (31.6 percent) have employed three or more baby sitters. The number of women in this category is small, however, so the figure must be interpreted cautiously.

Apart from relatives and baby sitters, mothers with children under two very rarely look for help from other sources. Less than five percent used daycare and less than two percent had other arrangements. While these figures are too small to analyze further, it is worth noting that of the 22 mothers who had children under two in daycare, only one had used more than one centre or program. This is undoubtedly related to the scarcity of programs for infants and the fact that once a mother has secured a place she has little opportunity to find any alternative space.

In the second category — two years to school age — the effects of original marital status and age on patterns of assistance are not as evident. At least 80 percent of both the married and unmarried mothers received assistance from relatives, again underlining the importance of familial help. Although the figures change somewhat when age is added to the analysis, the differences are not significant, although younger women are more likely to have had assistance from relatives. The percentage of mothers in each group who had such assistance is: young married 91.7 percent; young unmarried 88.1 percent; older married 75.3 percent; and older unmarried 83.3 percent. Most mothers in each category have access to a number of relatives who can help with childcare, but married mothers are typically able to call on more relatives than unmarried mothers. Among the unmarried mothers, 31.5 percent of the young and 34.0 percent of the older mothers have only one relative they can ask for assistance. These figures compare with 22.7 percent of the young married mothers and 27.4 percent of the older married mothers.

With baby sitters it is once more the married women who are significantly more likely to have used this form of childcare. (Phi = 0.137. Significance of Chi-square < 0.01, n = 501). When age is added to the analysis, it is again the older women who are considerably more likely to employ baby sitters, just as when their children were younger. At the extremes, only 45.2 percent of the young unmarried mothers have done so, compared to 67.6 percent of the older married mothers. For the young married mothers, 51.0 percent used baby sitters as did 61.7 percent of the older unmarried mothers. It is also evident that younger mothers are more reliant on one baby sitter than are the older mothers. For the young mothers, 46.8 percent of the married and 47.2 percent of the unmarried group report using only one baby sitter. The corresponding figures for the older mothers are 35.8 and 36.1 percent. These figures indicate that not only do more mothers use baby sitters when the children are toddlers than when they are infants, but that many also have access to a larger number of baby sitters during this period.

"Between two and starting school" is the category most likely to use daycare. Slightly over 50 percent of the mothers used this type of care, with 56.5 percent of the married and 45.2 percent of the unmarried mothers having had their children in daycare. Older married mothers are somewhat more likely than other mothers to have used daycare: 61.2 percent compared to 50.0 percent of the older unmarried group had used daycare (Phi = 0.101, Significance of Chi-square < 0.05, n = 501). For the mothers aged 19 and under, 39.6 percent of the married mothers had used daycare, and 41.3 percent of the unmarried group. Given the general scarcity of daycare spaces, the proportion of women in this study using daycare appears quite high, although these figures are affected by the broad definition of daycare being used. Indeed, the young mothers seem anomalous because of their relatively low use of daycare; the figures are however, still considerably above the national figures for children in this age group.

Not surprisingly, given the scarcity of places and centres, virtually all the mothers who had used daycare had used only one centre. Again, the older unmarried mothers are distinctive in that 20 percent of them had used two or three centres, but these figures are based on a small number of cases and their reliability may be questioned.

Once the children begin school, the need to provide care during the day decreases, although children still require care before and after school. As with the two younger groups, relatives and baby sitters are most commonly used. Unmarried mothers are most likely to seek assistance from relatives (87.1 percent) compared to the married mothers (81.3 percent). However, adding age to the analysis revealed this was true only for the older women. The percentages of mothers who receive assistance from relatives with their school-age children are: 19 and under — married 85.4 percent, unmarried 86.5 percent; 20 and over — married 77.2 percent, unmarried 85.0 percent. At least two-thirds of the mothers in each of the groups can call on at least two relatives for assistance, again suggesting more depth to the network of relatives and that the number of relatives who can assist changes little over time.

When the children are school-aged, a majority of mothers have also had help from baby sitters, particularly married mothers (81.6 percent) compared to unmarried mothers (68.8 percent)

(Phi = 0.138, Significance of Chi-square < 0.01, n = 501) This finding holds true for mothers in both age categories, although the differences are not significant. Seventy-two percent of the young married, 63.5 percent of young unmarried, 80.4 percent of older married, and 73.3 percent of older unmarried mothers rely on baby sitters for some childcare assistance. More than two-thirds of the mothers have two or more sitters.

Daycare facilities for after-school or summer programs are used by few mothers (8.6 percent). As the numbers are so small, it is not possible to analyze the data by original age and marital status. This is also the case for the mothers using other arrangements, which only 1.6 percent actually do.

Although it is important that mothers are part of social networks that allow them to call on others to help with childrearing and allow their children to have contact with more than a single care-giver, it is possible that a large number of care-givers can be a sign of stress and detrimental to the child. Frequent changes in those helping to look after the child might indicate the difficulty of finding and maintaining adequate care resulting in a recurrent turnover in helpers. Constant changes may make it difficult for children to relate to those looking after them and result in less satisfactory circumstances. The total number of childcare arrangements made for individual children ranged from three mothers who had done everything themselves to one mother who had had 37 different arrangements.

Not surprisingly, most mothers are not in such extreme circumstances. Two-thirds of the mothers (67.9 percent) report between one and seven different arrangements, with the remaining third of the mothers reporting eight or more arrangements. While the number of arrangements do reach quite high figures, less than five percent of the mothers report 14 or more arrangements. At the other end of the scale, only 10 percent of the mothers had two or fewer arrangements. The figures for the unmarried and the married mothers are very similar with 68.5 percent of the married and 72 percent of the unmarried using seven or fewer arrangements. It is the unmarried mothers, however, who are somewhat more likely to have two or fewer arrangements (14.6 percent) compared to the married women (7.4 percent). Large numbers of childcare arrangements, 14 or more, are also slightly more characteristic of unmarried mothers than married mothers, although for both groups the figures are still small — 6.9 percent and 3.7 percent, respectively.

These figures suggest that most of the mothers were able to make reasonable childcare arrangements without a dysfunctional level of changeover. With the extreme cases, however, it appears that some mothers had too little help while others found childcare difficult to arrange, resulting in large numbers of different arrangements. Both conclusions are supported by the fact that 76.1 percent of the mothers report "never" or "not very often" having difficulty in making childcare arrangements. Of the remaining mothers, 19.7 percent say they "sometimes" have difficulty and 4.1 percent report "usually" or "always" having problems. The problems cited relate to concerns about: the lack of quality care available; costs; having few relations or friends in the immediate area; and special requirements, because of employment or health matters, for instance.

These are not unusual reasons and are typically cited in discussions about the care of children. In looking at the 23.8 percent of mothers who report the most difficulty with childcare arrangements, the available data suggest no satisfactory explanation why this should be so. There are, for instance, no consistent differences between those mothers and the others who report few, if any, difficulties with childcare, on such dimensions as age, marital status, education or average household income. It must be remembered, however, that some of the findings reported in earlier chapters with respect to educational and employment opportunities, underline the fact that the lack of childcare arrangements can curtail these undertakings on the part of the mothers. The possibility of financial independence for some mothers, therefore, appears to be significantly limited because of a lack of assistance with childcare.

The majority of mothers in this study appear to have coped satisfactorily with childcare and childrearing. Few report no assistance whatsoever, or being overwhelmed with constantly having to make new and different arrangements. The importance of relatives is exceedingly evident. Assistance received from relatives is significant because, when coupled with help from husbands, it is a major source of childcare support. This underlines the problems mothers encounter when they have no husband or relatives on whom to call. While other arrangements can be made, baby sitters and daycare are more difficult alternatives because there are fewer people or institutions to call on. Certainly in the first two years of the child's life, care other than from the mother, her husband and relatives is circumscribed. Care from non-family members increases as the child grows older, although daycare appears to be important for only a short period and for only about half the children. Baby sitters, on the other hand, noticeably and consistently increase as a form of childcare as the children grow up.

Mother-Child Interactions

The previous section detailed the considerable amount of time mothers spend with their children, as well as the care children receive from others. As mothers are the primary care-givers however, it is important to further analyze this care. A question dealing with the nature and quality of mother-child interactions allowed greater exploration of these issues.

To understand the pattern of responses, the answers on the 70 items were analyzed by factor analysis. This analysis resulted in the identification of six factors, with between two and four items contributing to the various factors. Although this made it somewhat difficult to identify and label the theoretical underpinnings of each of the factors, the six factors can be generally described as follows:

1. Control through guilt — how the mother dealt with the child's inappropriate behaviour; alternatively known as the "nagging or guilt factor",
2. Issues related to caring for and reinforcing appropriate behaviour for the child,
3. Behaviour management through removal of contact with the child,
4. The encouragement of the child's self-responsibility,
5. The consistency of the mother's action with respect to the child's behaviour, and
6. The extent of the mother's follow-up on the child during the day.

Table 10.4 summarizes how mothers interacted with their children on these six factors.

No significant differences appeared in the nature of the caring (Item #2) reported by the mothers, with all mothers indicating frequently listening to their child and giving care and attention. Only one difference emerged with regard to the consistent application of rule enforcement (Item #5). It appears that all mothers seldom forget the rules they made or ignore misbehaviour, but 30 to 40 percent are talked out of their actions. Thus, some inconsistency in dealing with the child may occur since the rules can be avoided.

With regard to control of children through guilt (Item #1), a significant difference emerged between older unmarried and older married mothers. Fewer older married mothers reported telling the child they worried about the child's behaviour.

Table 10.4

Percentage of Mothers Responding to Questions Regarding Mother-Child Interaction by Mother's Original Age and Marital Status

	"Frequently"				"Half Time"				"Seldom"			
	19 years & younger		20 years & older		19 years & younger		20 years & older		19 years & younger		20 years & older	
	m	um	m	um	m	um	m	um	m	um	m	um
1. *Control Through Guilt*												
tell child how I worry	11	12	5	20	6	9	5	12	83	79	90	68[a]
remind child when bad	8	8	4	7	4	7	5	0	88	85	91	93
if child cared, then would not cause worry	19	25	18	35	11	16	12	16	70	59	69	49[b]
let know all I do	16	21	14	23	18	14	17	19	66	65	69	58
2. *Caring*												
give care and attend	87	88	93	92	13	10	7	8	0	2	0	0
enjoy listening and doing	93	93	94	92	7	5	5	7	0	2	1	1
3. *Control by Removal of Contact*												
avoid talking if bad	6	7	3	8	10	10	9	14	84	83	88	78
avoid looking if disappointed	3	7	2	3	9	10	4	7	88	83	94	90
withdraw from child	4	4	2	8	8	8	9	11	88	88	89	81[c]
4. *Self Responsibility*												
let dress as wants	69	67	70	63	21	20	22	27	10	13	8	10
let decide own issues	73	67	73	71	23	24	24	22	4	10	3	7
make decisions together	77	75	80	68	22	20	18	31	1	5	2	0[d]
5. *Consistency*												
talked out of actions	18	22	12	16	22	14	19	24	60	64	69	60
forget rules made	7	14	4	8	19	26	17	20	74	60	80	72
ignore misbehaviour	1	6	1	7	6	9	6	11	93	85	93	82[e]
6. *Follow-Up*												
set limits on act outside	42	45	50	61	13	18	13	12	45	37	37	27
check on what doing	37	54	50	51	17	18	21	26	46	29[f]	29	23
n =	(104)	(136)	(242)	(74)	(104)	(136)	(242)	(74)	(104)	(136)	(242)	(74)

m = Married
um = Unmarried

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[a] Cramer's V = .26, Significance of Chi-square < .0001
[b] Cramer's V = .19, Significance of Chi-square < .01
[c] Cramer's V = .15, Significance of Chi-square < .05
[d] Cramer's V = .15, Significance of Chi-square < .05
[e] Cramer's V = .17, Significance of Chi-square < .01
[f] Cramer's V = .19, Significance of Chi-square < .05

Furthermore, fewer older married mothers reported telling the child that if they cared for the mother they would not misbehave. These findings suggest that older unmarried mothers are more likely to use guilt as a means of control.

While no significant differences emerged between the groups by original marital status or age on the removal of eye contact or talking as a behaviour management technique (Item #3), significantly more older unmarried mothers did report using withdrawal of contact from the child compared to the older married mothers.

Significantly more older married mothers reported making decisions with their children (Item #4) but no difference emerged on this factor between the younger mothers, regardless of marital status. This suggests that the older married mothers encouraged the child's sense of self-responsibility to a greater extent than the older unmarried mothers. Significantly more younger, unmarried mothers, however, reported checking to see what their child was doing (Item #6) than did younger married mothers, implying a higher level of concern. No other statistically significant difference emerged regarding follow-up by mothers on their children.

The responses from the mothers on this question suggest that most children experience a caring home environment. The responses are similar for all categories of mothers and only intimate that the children will be treated in a particular way depending on the mother's original age and marital status. For example, married mothers, particularly older married mothers, appear to encourage their child's decision-making capacity more than older unmarried mothers.

With respect to discipline, however, the mothers use of effective and consistent behaviour management techniques is an issue for all mothers. Married mothers report sticking to the rules they set to a greater degree than unmarried mothers, but while all mothers seldom forget the rules they set, they do not necessarily apply them consistently. Further, few mothers discipline their child through the withdrawal of contact or other less obtrusive ways of managing children. But older unmarried mothers in particular stand out in their use of guilt to control their children. Discipline, therefore, appears to be an area where mothers are less sure about their interaction with their children. On the other hand, it is apparent that most mothers see the importance of giving active care and attention to their children and enjoy doing so.

One note of caution is necessary here, however. It is possible that the mothers are responding in socially acceptable ways rather than in terms of their actual behaviour. Certainly the mass media and educational practices inform mothers that physical punishment is ineffective in disciplining children, that children should be reasoned with and praised and encouraged to be curious, have their own opinions, and be treated with respect. But knowing what should be done does not necessarily mean that mothers act accordingly. As suggested earlier, establishing an appropriate environment for a child takes skill and ability. The questionnaire format used in this study is limiting in that mothers can portray what they choose or what they believe the researchers want to hear. Without observing and rating mother-child interactions, there is no way of actually knowing if the mothers always act in the way they described.

Footnotes

1. The responsibility of families with respect to young unmarried mothers was a central theme in the 1983 debate in the Nova Scotia legislature when amendments to the Family Benefits Act were introduced. These amendments make it possible for unmarried mothers under 19 to receive assistance "where there are extraordinary and compelling circumstances" (Assembly Debates, Monday, 25 April 1983, page 1839), i.e., where the unmarried mothers' family cannot provide assistance.

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11 Child Development

Background Literature

Over the years there has been considerable controversy about the effect of heredity and environment on the development of children, particularly their intelligence.[1] The debate is fuelled periodically by such research as Jensen's[2] on the limits set by each factor. Today, the majority of theorists accept an interactionalist, or combined, view of the influence of heredity and environment. This view is perhaps best summarized by Zigler and Farber[3] who stated that while genetic structure may set the upper and lower limits of performance, environment determines where a particular score on a test, such as an intelligence test, may fall.

The nature-nurture controversy appears reducible to how wide is the range of reaction. Those who support the environmental position argue for a wider range; those who support the hereditary position argue for a more restricted range. Translated into intelligence test scores, the nurture proponents accept a possible range of scores from 40 to 100 points. Proponents of the nature position accept a range of 25 or less.[4] However, no conclusive evidence exists to delineate the exact range of possible scores.

McCall[5] believes that what is necessary to understand the intellectual development of young children are factors that go beyond traditional measures, such as family influences, peer influences, maternal background and early intervention. Indeed, some such as Feuerstein[6] argue that an altogether different approach to the measurement of intelligence is necessary.

The present study, using an interactionalist framework, incorporates a range of factors that may affect ability. Thus ability is held to be the result of some combination of genetic endowment and environmental influences. However, an individual's score on an intelligence test does not permit inferences about the relative weight of genetic or environmental influences; the intelligence test simply measures acquired behaviour[7] and provides only an estimate of the child's current performance. Such scores cannot provide insight into what some have termed innate potential.[8]

Coll, Vohr, Hoffman and Oh[9] found that mother's age, family socio-economic status, and mother's education led to differences in childcare support, life stress and home environment, which culminated in a lower level of development for the children of younger mothers — because of the socio-demographic variables associated with the mother's age, not because of the mother's age itself. Unfortunately, this study tapped only a small sample of 42 Caucasian mothers and used a narrow range of dependant measures of development. As well, the data were obtained on children who were just eight months old. However, a study by Carlson, Labarba, Sclafani and Bowers[10] found significantly lower mental and developmental indices on the Bayley Scales of Infant Development for children of adolescent mothers at six and 12 months. Supporting these conclusions are the earlier studies of Oppel and Royston[11]; Lobl, Welcher and Mellits[12]; Belmont, Cohen and Dryfoos[13]; Roosa, Fitzgerald and Carlson[14]; and Kinard and Klerman.[15]

Together these studies show consistent deficits for children of teenage mothers with regard to intellectual development and school performance. However, many of the studies suffer from a small data base, lack of comparison groups and undertake follow-up only on very young children. Also most of the studies are based in the United States and include a high percentage of young unmarried black mothers, who are probably among the most disadvantage members of American society.

A further concern is the difficulty in separating the effects of belonging to a minority group or an economically disadvantaged family from the effects of adolescent childbearing and nurturing. Typical of the studies that are unclear about the effect of community differences is a study by Marecek[16] who found that babies of urban adolescent black mothers were slightly below average when their development was measured by the Bayley Scales of Infant Development at eight months; the Stanford Binet Intelligence Test at age four; and, the Wechsler Intelligence Scale for Children and the Wide Range Achievement Test at age seven. It is not known, though, what the implications of such results may be for non-black, urban children or for black urban children living in different areas of the country.

Despite the limitations of previous studies, a majority have documented a pattern of lower intellectual performance of children of young unmarried mothers. Dryfoos and Belmont[17], for example, found a significant effect of maternal age on intelligence as measured by the Wechsler Intelligence Scale for Children 6 through 11. Further, by conducting follow-up assessments, they found that the effect was maintained over a three and a half year period.

A study by Rothenberg and Varga[18] is one of the few studies that did not find any developmental differences. Using the Denver Developmental Screening Test, Rothenberg and Varga found that children of teenage mothers at approximately three years of age scored better on the Denver Total Score and on the Fine Motor Section than children of older mothers when the mother's socio-economic status, health and presence of a male were controlled. The study, however, was limited to 282 black and Hispanic women in New York City. As well, the Denver test has been criticized for a lack of information on validity and reliability and an inability to adequately classify children who appear to be at risk based on intelligence test performance.[19]

Two extensive reviews have also challenged earlier findings that children of young unmarried mothers have lower intelligence scores. Using three large data sets, Cohen, Belmont, Dryfoos, Stein and Zayac[20] examined the effects of maternal age for both white and black children. Their findings indicate there were no direct effects of teenage maternity on offspring intelligence and that the observed negative relationship was primarily attributable to parent education. However, children of women in their late 20s did better than children of mothers in their early 20s, who did better than children of teenage mothers. In general, effects of teenage childbearing are mediated by factors such as education, single-parent households and family size.

The second major review conducted by Brooks-Gunn and Furstenberg[21] likewise concluded that intellectual differences in children born to teenage mothers were minimal. However, the differences that exist become more pronounced as the children develop. Interestingly, boys born to teenage mothers appear to be more at risk than girls.

One cautionary note is in order with regard to the effects of mother's education and marital status. Longstreth, Davis, Carter, Flint, Owen, Rickert and Taylor[22] examined the effects of home environment, mother's intelligence score and socio-economic status on children's intelligence. They found that when maternal IQ was controlled, the effects of home environment and socio-economic status were not significant in predicting the child's level of intelligence. Thus maternal intelligence may be a major determinant not only of mothers' educational attainment, but also of children's performance on intelligence tests.

In the area of ability and achievement, Wadsworth, Taylor, Osborn and Butler[23] reported on a study of children born in the United Kingdom. The study followed children of mothers grouped by marital status, age and selected personal habits, such as smoking during pregnancy. One of the findings concerned the performance of five-year-olds on the English Picture Vocabulary Test (adapted from the Peabody Picture Vocabulary

Test). In general, vocabulary scores of children born to the youngest mothers (less than 18 years old) were significantly lower (almost half a standard deviation below the norm), with the greatest difference existing between children of the youngest mothers and those whose mothers were 35 years old or more at delivery.

There are proportionately fewer studies addressing the relationship of the mother's marital status and age to the self-esteem or self-image of children. In general, it appears the self-esteem of children is as good in single-parent families as in two-parent families.[24] However, several studies investigating the effects of family stigmatization found that self-esteem suffers when the social environment is perceived as outside the norm. This results in lower self-esteem for children, not because of the nature of the family, but because of social valuing.[25] A further study found that once mother's education and family structure were controlled, the effects of age disappeared with regard to self-image as measured by the Piers-Harris Children's Self Concept Scale.[26]

Simkins[27] reported that knowledge about the effects on the social and emotional development of children of adolescent mothers is not as abundant as for intellectual development. It appears that children of adolescent mothers at age four are overly conforming and somewhat uncommunicative, at age seven more hostile and resentful of authority, and that both boys and girls have school adjustment problems relating to peers and have little capacity to tolerate frustration. Simkins[28] concluded that relatively few studies have made a long-term, systematic and controlled comparison of the children of adolescent mothers with children in other family situations.

An early study by Oppel and Royston[29] compared children of mothers 17 and younger to children of mothers 18 and older at the time of childbirth. They asked a group of psychologists to rate the behaviour of the children at 8 and 10 years. In all but two of 13 areas, the psychologists rated the children of the younger mothers as having no more problems than the children of the other mothers. The only exceptions were in the areas of dependency and distractibility. Later, Kinard and Reinherz[30] examined the behaviour of approximately 500 children at the end of Grade Three using parent and teacher questionnaires. The children were divided into three groups, based on maternal age at the time of childbirth: ages 15-17; 18-19; and 20-24 years. Generally the results indicated that children of adolescent mothers (ages 15-17 and 18-19) are not at increased risk of behavioral and emotional problems. The critical variable, they concluded, is not maternal age but maternal education. Before controlling for maternal education, children of early adolescent mothers in single-parent families had the highest mean score for attention problems, while those of early adolescent mothers in two-parent families had the lowest.

Results

Previous studies on the relationship between mothers' age and marital status and the intellectual achievement, self-esteem, and social development of their children are often inconclusive and contradictory in their conclusions. One can find studies which suggest that the children of young unmarried mothers are disadvantaged with respect to their development, just as one can find studies that conclude that the development of these children is no different from that of their peers who came from different and more traditional family circumstances. One common theme in many of the studies, however, is that, while the age and marital status of mothers does not have a direct effect on the development of their children, there are indirect effects. In particular, the lower levels of eduational attainment of many young unmarried mothers appears to be related to lower levels of development for some children.

Two hundred and twenty-three children, participated in this aspect of the study. The children were grouped according to their mother's marital status and age at the time of their birth. The four groups consisted of: 55 children whose mothers were unmarried and 19 years or younger at the time of their birth; 47 children whose mothers were unmarried and 20 years or older at the time of their birth; 60 children whose mothers were married and 19 or younger; and 61 children whose mothers were married and 20 years or older.

The sample represented 96 percent of the original 232 children randomly selected to be part of the study. The nine children who did not participate in the study could not be located at the time of testing, were ill or the parent refused consent during follow-up.

All assessments were conducted by psychometrists under the direction of a psychologist. Assessments were conducted in the school that the child attended. The cooperation and permission of each school district in Nova Scotia was obtained from district directors of education, individual school principals and teachers, following the consent of both mothers and children. All children agreed to be assessed. The assessment usually ran three to four hours, including breaks. While the assessment was generally completed in one day, occasionally two days were necessary. Results of the assessments were provided to mothers and a summary provided to school officials in those cases where the mother agreed.

The following is a brief description of the tests used:

(1) The Wechsler Intelligence Scale for Children-Revised (WISC-R, Wechsler, 1974)[31] measures intellectual functioning and ability. While the WISC-R is somewhat dated (the last revision was 1970), it has excellent standardization, reliability and validity. As well, the WISC-R has wide applicability and a breadth of behaviours are sampled. Coverage includes general information, arithmetic, vocabulary, memory, social adjustment, common sense reasoning, visual motor coordination and sequencing. It also asks children to do puzzle-like tasks, build designs with blocks, complete mazes and pick out missing parts. Verbal, performance and full scale intelligence quotients are provided.

(2) The Peabody Picture Vocabulary Test-Revised (PPVT-R, Dunn and Dunn, 1981)[32] measures one aspect of language ability, vocabulary, by asking the child to select from among four pictures the one that best describes a word read by the examiner. Standardized on 4,200 students between 2.5 and 18 years of age, the PPVT-R has good reliability and validity. Coupled with the expressive vocabulary test on the WISC-R, the PPVT-R provides information on the language abilities of the child.

(3) The Beery Developmental Test of Visual Motor Integration (Berry, 1982),[33] assesses hand/eye coordination. While more information on the validity and reliability of the Beery would be helpful in evaluating this instrument, it is an acceptable method of gaining information on the hand/eye coordination of children. When compared to other such tests it offers a greater standardization sample and more items for children to copy to ascertain their fine visual development and motor control.

(4) The Basic Achievement Skills Individual Screener (BASIS, Psychological Corporation, 1983)[34] is a relatively new, individually-administered test of reading, mathematics, spelling and written expression and is designed for optimal use with students in grades one through eight. It is well standardized with acceptable levels of validity and reliability. As well, its content seems particularly suited to the Nova Scotia curriculum since it uses a sample of written expression. A modified cloze procedure, in which selected words in a passage are omitted for

the student to determine what they are, is also used to help ascertain reading comprehension.

(5) The Piers-Harris Self Concept Scale (Piers, 1984)[35] is a self-report questionnaire that determines how children view themselves. Children are asked to respond to selected items detailing specific aspects of how they see themselves. For example, children are asked to state whether they think bad thoughts. While instruments like this have problems with accuracy, a significant body of literature has been developed on the Piers-Harris so that indications of false responses may, in extreme cases, be identified. Nevertheless, it is possible for children to present a view of themselves that is different from how they really feel. In general, however, the Piers-Harris is a reasonably valid and reliable indicator of how children feel about themselves.

(6) The Achenbach Child Behaviour Rating Scale (Achenbach and Edelbrock, 1983)[36] assesses teacher and parent perceptions of the child's behaviour and social competence. Barkley[37] stated that the parent report form was one of the better developed and empirically-derived behaviour rating scales on the market today. The teacher report form, while demonstrating strong promise, is a newer instrument requiring additional documentation. Nevertheless, it is strong and, when coupled with the parent form, provides a valid and reliable indicator of children's behaviour in both home and school.

The teacher with the most contact completed the teacher's form to determine the child's behaviour, including social withdrawal, aggression, attention and activity. Mothers were asked to complete the parent form to determine the child's current behaviour in the areas of social withdrawal, activity, and aggression.

Children's Intelligence

Table 11.1 provides an overview of the verbal, performance, full scale IQ and verbal comprehension scores achieved by the four groups of children based on their mother's age and marital status.

An average score on the WISC-R for verbal performance and full scale IQ and verbal comprehension is 100, with a standard deviation of 15. As Table 11.1 reveals, the average level of ability in all groups was within the average range, that is, between 85 and 115. Indeed, the average score in each group was about 100. However, a wide range of IQ, and verbal comprehension on the

TABLE 11.1

Verbal, Performance, Full Scale IQ and Verbal Comprehension Total Scaled Scores of Children on the Wechsler Intelligence Scale for Children-Revised, by Mother's Original Marital Status and Age

	Marital Status			
	Married	(n)	Unmarried	(n)
Verbal IQ	102.4	(119)	99.1	(99)
Performance IQ	106.3	(120)	103.4	(99)
Full Scale IQ	104.5	(119)	100.6	(99) [a]
Verbal Comprehension	42.7	(119)	39.7	(99) [b]

	19 YEARS AND UNDER				20 YEARS AND OVER			
	Married	(n)	Unmarried	(n)	Married	(n)	Unmarried	(n)
Verbal IQ	100.1	(59)	97.8	(53)	104.7	(60)	100.6	(46)
Performance IQ	105.6	(59)	102.9	(53)	106.9	(61)	103.9	(46)
Full Scale IQ	102.7	(59)	99.2	(53)	106.2	(60)	102.3	(46)
Verbal Comprehension	40.9	(59)	38.8	(53)	44.4	(60)	40.7	(46) [c]

[a] $t = 2.06, p < .05$

[b] $t = 2.43, p < .05$

[c] $t = 2.07, p < .05$

WISC–R scores was found within the total sample, which means that while the overall performance of the groups was in the average range, some children performed well below average (a low of 45 on the performance scale), and others performed well above average (a high of 142 on both the performance and full scales). While the range is representative of a large sample of school-age children, it is critical to note that, overall, approximately 14 percent of the sample scored below average on the verbal IQ and approximately 10 percent scored below average on the full scale IQ.

The only significant difference found on the full scale IQ of the children related to marital status. The children of married mothers scored, on average, higher than the children of unmarried mothers. An analysis of the subtests that most reflect verbal and vocabulary comprehension revealed two significant differences (see Table 11.1). Children of married mothers scored significantly higher on the verbal comprehension factor of the

WISC-R than the children of unmarried mothers, as did children of older married mothers compared to children of older unmarried mothers.

Table 11.2 provides an overview of scores achieved by the children on the Peabody Picture Vocabulary Test-Revised, a test of receptive vocabulary; the Basic Academic Skills Individual Screener, which focuses on math and reading; and the Beery Test of Visual Motor Integration, by mother's marital status and age. Interestingly, on average all children scored within the average range of 100 plus or minus 15, one standard deviation of the mean, on receptive vocabulary. The range of scores approximated the normal range found in the general population. But children of unmarried mothers scored significantly lower than children of married mothers. As well, children of young unmarried mothers scored significantly lower than children of young married mothers.

TABLE 11.2

Performance of Children on Receptive Vocabulary, Achievement and Hand/Eye Coordination by Mother's Original Marital Status and Age

	Marital Status			
	Married	(n)	Unmarried	(n)
Receptive Vocabulary	102.1	(120)	97.3	(102)[a]
Reading	103.6	(118)	96.7	(98)[b]
Math	98.3	(118)	95.1	(99)
Visual Motor	17.7	(109)	16.4	(86)[c]

	19 YEARS AND UNDER				20 YEARS AND OVER			
	Married	(n)	Unmarried	(n)	Married	(n)	Unmarried	(n)
Receptive Vocabulary	100.5	(59)	95.7	(55)[d]	103.6	(61)	99.1	(47)
Reading	103.2	(59)	94.9	(53)[e]	104.1	(59)	98.8	(45)
Math	98.3	(59)	94.4	(53)	98.3	(59)	95.9	(46)
Visual Motor	17.6	(53)	16.9	(45)	17.8	(56)	15.8	(41)[f]

[a] $t = 2.58, p < .05$
[b] $t = 1.34, p < .01$
[c] $t = 2.90, p < .01$
[d] $t = 1.98, p < .05$
[e] $t = 2.93, p < .01$
[f] $t = 3.44, p < .001$

While the Basic Academic Skills Individual Screener covers reading, math, spelling and writing, only math and reading are reported due to problems analyzing the data from the writing and spelling subtests. No significant differences were found for any of the groups on the math subtest. But the children of unmarried mothers scored significantly lower on reading achievement than the children of married mothers. On the reading subtest a significant difference was also found between the scores of children of young unmarried mothers and those of young married mothers: the children of young unmarried mothers scored significantly lower (see Table 11.2).

It is encouraging to note that none of the four groups, on average, scored outside the normal range. With regard to individual scores, however, the range does indicate that some children did score significantly below average while others scored significantly above average on both the math and reading subtests.

The children's scores on the Beery Test of Visual Motor Integration revealed that those of married mothers were significantly higher than those of unmarried mothers (see Table 11.2). As well, the scores of the children of older unmarried mothers and older married mothers were significantly different.

To determine whether any differences emerged between the groups on the Achenbach Behaviour Rating Profile — Teachers' Edition, the Mann-Whitney U test was used. Overall, children of mothers married at childbirth were perceived by their teachers as having significantly fewer indications of social withdrawal than were children of mothers who were unmarried at childbirth ($U = 4066, p < .001, n = 213$).

In the case of the teachers' perceptions of the children on social withdrawal, inattention, nervous overactive and aggressive behaviour, differences emerged among both the married and unmarried groups on social withdrawal and inattention. Teachers of children of young married mothers perceived them as having fewer signs of social withdrawal than did teachers of children of young unmarried mothers ($U = 1047, p < .05, n = 111$). As well, teachers of children whose mothers were married, and 20 and older at childbirth saw those children as less socially withdrawn than children of mothers who were unmarried, and 20 and older at childbirth ($U = 984.5, p < .05, n = 102$).

Children of young married mothers were seen by their teachers as more attentive than children of young unmarried mothers ($U = 1012, p < .05, n = 111$). Children of older married mothers were seen as more attentive than the children of their unmarried counterparts (U = 871.5, p < .05, n = 102). In general, children of mothers married at childbirth were perceived by teachers as significantly more attentive than children of mothers who were unmarried at childbirth (U = 378.5, p < .0001, n = 213).

The only significant group difference to emerge on the nervous overactive scale was that children of married mothers were perceived as less active than children of unmarried mothers (U = 4651, p < .05, n = 213). However, on the aggression scale children of young unmarried mothers were perceived as more aggressive by their teachers than were children of young married mothers. Indeed, children of young unmarried mothers were perceived by their teachers as the most aggressive of the four groups. Overall, children of mothers married at childbirth were seen by their teachers as significantly less aggressive than children of mothers who were unmarried at childbirth (U = 4116, p < .001, n = 213).

With regard to mothers' perceptions of their children using the Achenbach Behaviour Rating Scale, no differences emerged on the social withdrawal scale. However, mothers who were unmarried at the time of childbirth perceived their children as more hyperactive than mothers who were married at the time of childbirth (U = 4936, P < .05, n = 222). Unmarried mothers 19 and younger perceived their children to be more hyperactive than did married mothers 19 and younger (U = 1079.5, p < .05, n = 115).

No differences emerged between any of the four groups on the children's own perception of self. On average, children in all four groups indicated a positive self image.

Overall it appears that children of mothers married at the time of childbirth, regardless of age, were perceived as less socially withdrawn, more attentive and less hyperactive than children of unmarried mothers, but no statistically significant differences emerged on self concept. Children of married mothers also had significantly higher scores on the full scale IQ. In fact, children of older married mothers scored significantly higher on the verbal comprehension factor of the intelligence test than the children of unmarried mothers. This was also the case with receptive vocabulary, visual motor coordination and reading achievement. Thus it seems that the children of married mothers scored higher regardless of the age of their mother at childbirth. However, no differences emerged on mathematical achievement.

Effect of Selected Demographic Variables:

Community Size

Community size was divided into three categories: Area 1 included cities with 30,000 to 499,999 people; area 2 included smaller cities with 15,000 to 29,999 people; and area 3 included small, rural communities under 15,000. Table 11.3 provides the distribution of families by geographical location.

TABLE 11.3

Community Size of Participants in the Study

		Number of Participants	**% of Total**
Area 1:	large cities (population 30,000 — 499,999)	65	29.1%
Area 2:	smaller cities (population 15,000 — 29,999)	74	33.2%
Area 3:	small, rural towns (population under 15,000)	84	37.7%

As shown in Table 11.4, a significant difference in verbal and full scale IQ was found between children from large cities and small rural areas.

In each case, children of mothers living in small rural areas scored significantly lower than children of mothers living in large cities. It is important to note, however, that on average children in all three areas scored within the average range of ability, suggesting, in effect, that it is unlikely that real differences exist. This is borne out in the following sections which show that there were no differences in receptive vocabulary or reading performance, both indicators related to verbal and full scale intelligence.

Community size did not have a statistically significant effect on the receptive vocabulary or reading performance of the children in this study. However, a statistically-significant difference was found in the math performance of children. Children living in the rural areas scored significantly lower than children living in either the larger cities or smaller-size cities.

TABLE 11.4

Effect of Community Size on IQ of Children

	Mean	(n)	Standard Deviation
Verbal IQ			
Area 1	104.5[a]	(64)	11.7
Area 2	100.5	(72)	12.8
Area 3	98.4[a]	(82)	14.2
Performance IQ			
Area 1	105.9	(65)	14.2
Area 2	105.9	(72)	14.2
Area 3	103.4	(82)	15.7
Full Scale IQ			
Area 1	105.7[b]	(64)	13.0
Area 2	102.5	(72)	14.2
Area 3	100.7[b]	(82)	14.7

[a] $t = 2.80$, $p < .01$

[b] $t = 2.13$, $p < .05$

Although an overall average of the three groups indicated a normal range of achievement, the rural areas resulted in a wider standard deviation than the smaller and larger cities (see Table 11.5).

TABLE 11.5

Standard Score Distribution of Math and Reading Achievement of Children According to Community Size

Community Size	Mean Standard Score	(n)	Standard Deviation
Reading Scores			
Area 1	101.3	(60)	16.3
Area 2	102.5	(73)	16.3
Area 3	98.1	(83)	19.7
Math Scores			
Area 1	101.1[b]	(60)	13.0
Area 2	98.3[a]	(74)	14.8
Area 3	92.5[ab]	(83)	17.3

[a] $t = 2.24$, $p < .05$

[b] $t = 3.26$, $p < .001$

Significant differences in the development of hand/eye coordination were also found between children in larger cities and children in both smaller cities and small rural areas (see Table 11.6). Children living in larger cities scored higher than children living in either the small rural areas or the smaller cities.

TABLE 11.6

Performance of Children on the Beery Visual Motor Integration Test According to Community Size

Community Size	Mean Raw Score	(n)	Standard Deviation
Area 1	15.9^{ab}	(63)	2.7
Area 2	18.2^{a}	(65)	2.8
Area 3	17.2^{b}	(67)	3.2

[a]. $t = -4.68$, $p < .0001$
[b]. $t = -2.53$, $p < .05$

No statistically significant differences were found between the groups with regard to teachers' perceptions of the children's behaviour. As well, no statistically significant differences were found between the three community sizes on the hyperactive scale of the Achenbach as perceived by the mothers. However, mothers living in small rural settings reported their children to be more socially withdrawn than mothers in smaller size cities ($U = 2095.5$, $p < .05$, $n = 157$). As well, mothers living in small rural settings reported their children to be more aggressive ($U = 2312$, $p < .05$, $n = 157$) although no statistically significant differences emerged between the three community sizes with regard to the children's self-image.

Mother's Education

To determine the effect of the mothers' educational levels on their children's IQ scores, mother's education was broken into two variables: those with 11 years education or less became one group, and those with 12 years education or more another. (The mothers' educational levels are based on their current educational level and not their level at the time their first child was born.) The distribution of mothers by education is provided in Table 11.7.

TABLE 11.7

Current Level of Mother's Education

	Number of Participants	% of Total Participants
11 years or less of school	80	35.9%
12 years or more of school	122	54.7%
education unknown	21	9.4%

A significant difference was found between the IQ of children of mothers with 11 or fewer years education and the children of mothers with 12 or more years education. While children of mothers in both groups scored within the average range of ability, the difference between the groups approached 10 points on the verbal and full scale IQs, and five points on the performance scale (see Table 11.8). A difference of 12 to 15 points is usually considered to be clinically significant.

TABLE 11.8

Distribution of WISC-R Scores for Children According to Mother's Current Educational Level

Years of School	Mean Standard Score	(n)	Standard Deviation
Verbal IQ			
11 years or less	95.8[a]	(80)	13.1
12 years or more	104.2[a]	(117)	12.1
Performance IQ			
11 years or less	101.9	(80)	14.9
12 years or more	106.9	(118)	14.5
Full Scale IQ			
11 years or less	97.6[b]	(80)	14.6
12 years or more	106.1[b]	(117)	12.9

[a]. $t = -4.65$, $p < .001$
[b]. $t = -4.24$, $p < .001$

In each case, children of mothers with 12 or more years education performed higher. A significant difference was also found between the receptive vocabulary level of children in these two groups. While children of mothers in both samples scored within the average range (see Table 11.9), the children of mothers with 11 or fewer years education scored significantly lower.

TABLE 11.9

Distribution of Receptive Vocabulary Scores of Children According to Mother's Current Educational Level

Years of School	Mean Standard Score	(n)	Standard Deviation
11 years or less	104.0[a]	(80)	12.3
12 years or more	110.7[a]	(121)	11.6

[a]. $t = -3.93$, $p < .001$

Table 11.10 presents the results of the children's mathematical and reading performance by the level of education of the mother. Mother's education had a significant effect on the reading and math achievement of their children. The children of mothers with 11 or fewer years education scored significantly lower (seven to eight standard score points) on both reading and math although, once again, their group averages were in the normal range.

TABLE 11.10

Distribution of Reading and Math Achievement Scores of Children According to Mother's Current Educational Level

Years of School	Mean Standard Score	(n)	Standard Deviation
Reading Scores			
11 years or less	95.2[a]	(78)	14.5
12 years or more	103.6[a]	(117)	19.1
Math Scores			
11 years or less	92.9[b]	(78)	14.4
12 years or more	99.3[b]	(118)	15.8

[a]. $t = -3.33$, $p < .001$

[b]. $t = -2.86$, $p < .01$

Another significant difference was found between children of mothers with 11 or fewer years education and those whose mothers had 12 or more years education in terms of hand/eye coordination. Children of mothers with lower education scored lower on the Beery Test of Visual Motor Integration (see Table 11.11).

TABLE 11.11

Performance of Children on the Beery Visual Motor Test According to Mother's Current Educational Level

Years of School	Mean Raw Score	(n)	Standard Deviation
11 years or less	16.3[a]	(72)	3.2
12 years or more	17.7[a]	(107)	2.8

[a] $t = -3.22$, $p < .01$

While no statistically significant differences were found for teacher's ratings of children on the nervous overactive scale or the aggression scale of the Achenbach for Teachers according to mother's education, differences were found on the social withdrawal scale and the inattentive scale. Specifically, children perceived as being more socially withdrawn ($U = 3532.5$, $p < .05$, $n = 195$) and more inattentive ($U = 3358.5$, $p < .05$, $n = 195$) by teachers had mothers who had 11 or fewer years education. No statistically significant differences between the two groups emerged from the mother's report of her child's behaviour on scales covering social withdrawal, aggression or hyperactivity.

While on average an overall positive self-image was reported by the children, some significant differences did emerge. Children of mothers whose educational attainment was 11 or fewer years reported a statistically significantly lower self-image on behaviour, happiness and total self-image.

In general, few differences emerged as a result of geographical location. While children in the larger cities scored significantly higher on verbal and full scale IQ, their scores and the scores of children in the smaller cities and rural areas were all within the average range. As well, knowledge of academic subjects, including receptive vocabulary and reading, both of which are correlated with verbal and full scale IQ, were in the average range. Furthermore, no significant differences were found among the groups by geographical location. The differences that did emerge on the verbal and full scale IQ tests are felt to be a statistical reflection of the range of scores and not representative of any clinically significant differences in the children from different geographical locations. It is not known why the children from rural areas scored lower on math achievement but no differences emerged on reading achievement. As well, the analysis did not reveal why mothers of children in rural areas reported their children to be more aggressive and socially withdrawn than did mothers from the other geographical locations. However, teachers did not report any behaviour differences.

With regard to mother's educational attainment, a number of significant differences materialized. For example, while their scores were in the average range, children of mothers with 11 or fewer years formal education scored lower on the IQ test, on vocabulary and on math and reading achievement. Less developed hand/eye coordination was also noted in the children of mothers with 11 or fewer years formal education and teachers reported that these children were more socially withdrawn and less attentive. As well, these children reported a lower self-image. However, their overall self-image was positive.

Effect of Daycare Experience

To determine what effect, if any, daycare experience had on IQ, vocabulary, achievement, self-image, behaviour and hand/eye coordination, a cross tabulation with daycare experiences was conducted. Table 11.12 provides a summary of the number of children and type of daycare experiences their mothers reported.

TABLE 11.12

Number of Children Attending Daycare by Age Category

Age Attending Daycare	Number of Children	% of Total
birth to 2 years	14	6.3
2 years to school	80	35.9
not attending daycare	129	57.8

In general, the majority of children did not have a daycare experience in either "birth to two years" or "age two to the beginning of school". For those children who did experience daycare at this age, the nature and quality of the experience is not known.

Except for a difference on the full scale IQ scores, no differences emerged between those who had attended daycare and those who had not (see Table 11.13). Children who attended daycare from the age of two until the beginning of school scored significantly higher on the full scale IQ of the WISC–R than children who did not have such a daycare experience ($t = 2.18$, $p < .05$, $n = 217$). However, as previously noted, both groups of children achieved in the normal range of intellectual performance.

TABLE 11.13

Performance on the WISC-R of Children Attending Daycare from Birth to School Entry Compared with Performance of Daycare Non-Attendees

Age Attending Daycare	Mean	Number of Children	Standard Deviation
Birth to 2 years			
Attending Daycare	107.4	14	21.8
Not Attending	102.4	204	13.9
2 Years to School			
Attending Daycare	105.4[a]	79	14.1
Not Attending	101.1[a]	138	13.9

[a]. $t = 2.18$, $p < .05$

Gender Differences

A relatively even split between the number of males and females in the study was found. Of the 223 participants, 116 were boys and 107 were girls. (Table 11.14 provides a breakdown, by sex, of the four groups of children under study.)

An analysis of the differences between males and females, regardless of mothers' age and marital status, revealed that no differences existed between boys and girls on vocabulary, reading and mathematical achievement, intelligence or hand/eye coordination. However, with regard to self-image, boys indicated a less positive self-image ($U = 4779.5$, $p < .05$, $n = 222$). Teachers and mothers tended to rate boys and girls differently. Specifically, teachers rated boys as more inattentive ($U = 3787$, $p < .05$, $n = 213$), more aggressive ($U = 3861$, $p < .05$, $n = 213$), and more nervously overactive ($U = 3854$, $p < .05$, $n = 213$) while mothers tended to rate their daughters as more socially withdrawn ($U = 4426.5$, $p < .05$, $n = 222$).

TABLE 11.14

Number and Percentage of Male and Female Children Participating in the Study by Mother's Original Marital Status and Age

Mother's Marital Status and Age	# Male Children	% of Total	# Female Children	% of Total
Married/ 20 Years and Over	33	14.8%	28	12.6%
Married/19 Years and Under	29	13.0	31	13.9
Unmarried/20 Years and Over	24	10.8	23	10.3
Unmarried/19 Years and Under	30	13.5	25	11.2

Impact of Mother's Education and Marital Status

Oppel and Royston[38] and Coll et al.[39] found that it was not so much mother's age or marital status that affected a child's performance on such variables as achievement and ability, but educational level. An analysis of the combined effect of these three variables on the children's intellectual ability, achievement, vocabulary, hand/eye coordination, self-image and behaviour was conducted. The results are presented in Tables 11.15 and 11.16.

Table 11.15 indicates that there were few differences between the children of married and unmarried mothers. For those mothers with 11 years or less education the only significant difference occurred on the teacher rating of aggression levels. Specifically, teachers rated children of unmarried mothers with 11 or fewer years education as having significantly higher levels of aggression than children of married mothers with the same level education ($U = 478.5$, $p < .05$, $n = 75$).

As with less educated mothers, children of unmarried mothers with 12 or more years education were perceived by their teachers as significantly more aggressive than children of married

TABLE [illegible]

Performance of Children on Cognitive and Affective Measures by Mother's Original Marital Status and Current Educational Level

	11 or Less Years of Education				12 or More Years of Education			
	Married	**(n)**	**Unmarried**	**(n)**	**Married**	**(n)**	**Unmarried**	**(n)**
Achenbach Moms[1]								
Socially Withdrawn	42.7	(30)	39.2	(50)	57.4	(81)	68.3	(40)
Hyperactive	39.3	(30)	41.2	(50)	56.6	(81)	69.9[a]	(40)
Aggressive	41.3	(30)	40.0	(50)	58.3	(81)	66.5	(40)
Achenbach Teachers[1]								
Socially Withdrawn	34.9	(30)	40.0	(45)	56.1	(81)	69.7[b]	(39)
Inattentive	34.8	(30)	40.1	(45)	53.5	(81)	75.0[c]	(39)
Nervous Overactive	33.4	(30)	41.0	(45)	58.2	(81)	65.2	(39)
Aggressive	31.5	(30)	42.4[d]	(45)	54.9	(81)	72.0[e]	(39)
Piers Harris[1]								
Total	43.6	(30)	38.7	(50)	60.8	(81)	61.4	(40)
Behavior	44.5	(30)	38.1	(50)	60.2	(81)	62.6	(40)
Happiness	43.2	(30)	38.9	(50)	59.0	(81)	65.0	(40)
Achievement[2]								
Math	93.6	(30)	92.6	(48)	99.4	(79)	99.2	(39)
Reading	98.6	(30)	93.0	(48)	104.8	(79)	101.0	(38)
Intelligence[2]								
Verbal	94.7	(30)	96.4	(50)	104.9	(80)	102.8	(37)
Performance	102.7	(30)	101.4	(50)	106.7	(81)	107.5	(37)
Full Scale	98.1	(30)	97.4	(50)	106.2	(80)	105.6	(37)
Vocabulary[1]	96.8	(30)	94.3	(50)	104.2	(81)	100.9	(40)
Hand/Eye[1]	115.9	(30)	111.1	(49)	126.3	(81)	121.8	(40)

[a]. U = 1261, $p < .05$
[b]. U = 1220, $p < .05$
[c]. U = 1014, $p < .01$
[d]. U = 478, $p < .05$
[e]. U = 1131, $p < .01$

[1] raw scores
[2] standard scores

mothers with 12 or more years education (U = 1131, $p < .01$, n = 120). Teachers also perceived these children to be more socially withdrawn (U = 1220.5, $p < .05$, n = 120) and inattentive (U = 1014, $p < .01$, n = 120), while unmarried mothers with 12 or more years education perceived their children to be more hyperactive (U = 1261, $p < .05$, n = 121). No differences, however, emerged on the achievement or intellectual variables.

With regard to the effect of mothers' education and marital status on their children, no significant differences emerged between the children of young married and young unmarried mothers who had 11 or fewer years education. For those children whose mothers were older at the time of childbirth and who had 11 or fewer years education only one significant difference emerged: The children of the unmarried mothers had a lower self-image than the children of married mothers who were 20 or older with 11 or fewer years education (U = 19.0, p < .01, n = 27). (See Table 11.16)

TABLE 11.16

Performance of Children on Cognitive and Affective Measures by Mother's Original Age and Marital Status, and Mother's Current Educational Level

	11 or Less Years of Education				**12 or More Years of Education**			
	19 YEARS & UNDER				**19 YEARS & UNDER**			
	Married	**(n)**	**Unmarried**	**(n)**	**Married**	**(n)**	**Unmarried**	**(n)**
Achenbach Moms[1]								
Socially Withdrawn	29.4	(24)	25.1	(29)	21.9	(30)	30.9[a]	(20)
Hyperactive	26.1	(24)	27.8	(29)	20.4	(30)	33.2[b]	(20)
Aggressive	27.9	(24)	26.3	(29)	22.4	(30)	30.1	(20)
Achenbach Teachers[1]								
Socially Withdrawn	22.8	(24)	28.0	(26)	20.9	(29)	30.9[c]	(20)
Inattentive	22.6	(24)	28.2	(26)	21.0	(29)	30.8[d]	(20)
Nervous overactive	22.7	(24)	28.9	(26)	24.6	(29)	25.5	(20)
Aggressive	21.8	(24)	28.9	(26)	21.1	(29)	30.6[e]	(20)
Piers Harris[1]								
Total	26.1	(24)	27.7	(29)	26.3	(29)	23.2	(20)
Behavior	28.3	(24)	25.9	(29)	24.9	(29)	25.2	(20)
Happiness	27.1	(24)	26.9	(29)	23.5	(29)	27.2	(20)
Achievement[2]								
Math	93.6	(24)	91.5	(28)	100.0	(29)	99.3	(19)
Reading	97.5	(24)	91.7	(28)	105.2	(29)	96.8[f]	(19)
Intelligence[2]								
Verbal	94.3	(24)	95.7	(29)	103.4	(29)	99.5	(18)
Performance	103.9	(24)	100.7	(29)	104.8	(29)	109.1	(18)
Full scale	98.4	(24)	95.9	(29)	104.4	(29)	104.4	(18)
Vocabulary[1]	97.3	(24)	92.4	(29)	102.3	(29)	99.0	(20)
Hand/Eye[1]	114.5	(24)	112.9	(28)	129.8	(29)	131.2	(20)

[a] U = 190.5, p < .05

[b] U = 145.5, p < .01

[c] U = 172.5, p < .05

[d] U = 174.5, p < .05

[e] U = 177.5, p < .05

[f] t = - 2.02, p < .05

[1] raw scores

[2] standard scores

CONTINUED

Table 11.16 continued

	11 or Less Years of Education				12 or More Years of Education			
	20 YEARS & OVER				20 YEARS & OVER			
	Married	**(n)**	**Unmarried**	**(n)**	**Married**	**(n)**	**Unmarried**	**(n)**
Achenbach Moms[1]								
Socially Withdrawn	12.0	(6)	14.6	(21)	35.9	(51)	36.2	(20)
Hyperactive	13.1	(6)	14.3	(21)	36.6	(51)	34.6	(20)
Aggressive	13.4	(6)	14.1	(21)	36.2	(51)	35.5	(20)
Achenbach Teachers[1]								
Socially Withdrawn	12.8	(6)	13.1	(19)	35.5	(52)	37.3	(19)
Inattentive	11.3	(6)	13.6	(19)	33.1	(52)	44.1[a]	(18)
Nervous overactive	9.5	(6)	14.1	(19)	34.5	(52)	40.0	(19)
Aggressive	8.7	(6)	14.4	(19)	34.5	(52)	40.0	(19)
Piers Harris[1]								
Total	21.3	(6)	11.9[b]	(21)	35.0	(52)	40.4	(20)
Behavior	18.4	(6)	12.7	(21)	35.5	(52)	39.0	(20)
Happiness	18.3	(6)	12.8	(21)	35.6	(52)	38.2	(20)
Achievement[2]								
Math	93.5	(6)	94.2	(20)	99.1	(50)	99.2	(20)
Reading	103.0	(6)	94.9	(20)	104.7	(50)	105.3	(19)
Intelligence[2]								
Verbal	96.2	(6)	97.5	(21)	105.8	(51)	105.4	(19)
Performance	97.7	(6)	102.4	(21)	107.7	(52)	105.9	(19)
Full scale	96.7	(6)	99.3	(21)	107.3	(51)	106.7	(19)
Vocabulary[1]	94.5	(6)	96.9	(21)	105.3	(52)	102.9	(20)
Hand/Eye[1]	121.5	(6)	108.5	(21)	124.4	(52)	112.3	(20)

[a]. $U = 340.5$, $p < .05$

[b]. $U = 19.0$, $p < .05$

[1]. raw score

[2]. standard score

Only one significant difference emerged for children of mothers 20 and over with 12 or more years education (see Table 11.16). Those children whose mothers were unmarried at childbirth were rated by their teachers as more inattentive than the children of their married counterparts.

For the children of young mothers with 12 or more years education there were, however, a number of significant differences. Both teachers and mothers rated the behaviour of children of unmarried mothers in this category as more problematic in the areas of social withdrawal, activity, attention and aggression than the children of married mothers, 19 and under at childbirth with 12 or more years education. As well, these same children scored significantly lower on a test of reading than did the children of married mothers in this group.

It is apparent that for this sample, the children of better-educated, young, unmarried mothers tended to be identified by both their mothers and their teachers as having more behaviour problems. Because of some unique combination of factors these children are at a higher risk for continued problems than the general population of children. This is somewhat surprising since one might expect the children of younger unmarried and lower-educated mothers to have more behaviour problems.

In summary, this Chapter examined the impact of mother's age, marital status, education and other demographic variables on the intellectual, emotional and academic development of their children. Data pertaining to the child's intellectual functioning, reading and mathematical achievement, hand/eye coordination, vocabulary, self-image and behaviour were discussed.

One of the more significant findings is that there were no statistically or clinically significant group differences among the children with regard to intelligence relative to the age and marital status of their mothers. However, children of unmarried mothers scored significantly lower than children of married mothers when age was not a factor. With few exceptions, children of younger unmarried mothers with less education scored lower on measures of their intelligence, vocabulary, achievement, hand/eye coordination, and on their own and their teacher's rating of their behaviour than the children of older married mothers with 12 or more years education.

While maternal education at the time of the research, rather than at childbirth, was used, it was still the most significant factor affecting children's performances on intellectual and emotional variables. In many cases, it appears that the children of unmarried, younger and less-educated mothers perform less well than the children of married, older and more-educated mothers. Only in the behaviour ratings by teachers and mothers do the children of the more-educated mothers reveal a higher incidence of concern.

Despite the general average performance of the children across ability, achievement, self-image and most behaviour ratings, there are enough significant differences to warrant further investigation and follow-up. For example, on the verbal comprehension factor of the WISC-R, children of younger unmarried mothers and older unmarried mothers did not perform as highly as the children of older married mothers. But this finding should not be interpreted in isolation; several related findings need to be considered relative to the total effect on the children's language development and their school performance.

First, children of young unmarried mothers scored lower on receptive vocabulary and reading achievement. Second, both reading and math test scores as well as verbal and full scale IQ scores were lower for the children of mothers with 11 or less years education. Third, previous research indicates that problems of younger children tend to get worse if some form of intervention is not undertaken. Fourth, the children in this study will continue to be exposed to academically challenging environments. Given the present teacher ratings on attention, aggression and social withdrawal of those children born to young unmarried mothers, it is reasonable to assume that further declines may be possible if these children, who now are still within the average range, do not receive some form of positive intervention. For children living in rural areas these findings may be of even greater significance since this study found living in a small rural area to be a significant predictor of lowered math, verbal and full scale IQ scores. Although the reasons for the differences between the rural and urban children have not been explored in depth, it is likely that the opportunities and services available to the urban children as opposed to children in rural regions account for part of the observed differences. Finally, in just about every case the children of younger, unmarried and less educated mothers scored lower (in some cases significantly lower) on the range of variables than the children of older, married and more highly-educated mothers.

With regard to ability and achievement, the results are positive. On a group basis, average performance was observed and few differences emerged between the children on the basis of their mother's marital status and age at the time their first child was born. However, reading, language, thinking and verbal skills are inextricably related. Given the present performance of the children of younger unmarried mothers, there is a need to be concerned about their continued progress in verbal comprehension, language and reading. This is particularly relevant for mothers with less than 11 years of formal education living in a rural area. It is even more relevant for mothers who were unmarried at the time of childbirth. Further assessment and follow-up of such children with specific interventions should be a high priority. The children of younger unmarried and lower-educated mothers are at a higher risk than children in the general population for continuing problems given their current performance.

With regard to emotional variables, such as self-image, and the behavioral variables it appears once again that there is much to feel positive about. On a group basis, few significant differences emerged and even when a difference did emerge the performance of the lower group was still within the average to low-average range. However, Simkins'[40] study is of some significance here. Generally, Simkins found that children of adolescent mothers were overly conforming and less communicative. Therefore, any self-reported differences should be carefully noted. For example, in the present study, boys reported a lower self-image. Coupled with the reported problems of behaviour, attention and aggression noted by teachers, particularly of boys, this may have more significance than a cursory review would indicate. Further, in this study, self-image was generally lower for children of mothers who had 11 years or less formal education. It must also be remembered that self-concept tests are not typically as well validated and reliable as other forms of assessment. Indeed, the psychometricians who assessed the children reported a concern that some of the participants may not have accurately completed the self-concept scale, since the desired answers may have been obvious.

With regard to behaviour, children of younger mothers tended to be reported as more aggressive, less attentive and more socially withdrawn. In particular, females were reported by their mothers to be more socially withdrawn. Since social withdrawal is felt to be related to depression, there is concern for future emotional development. This is particularly the case when the educational level of the mother is 11 years or less since the present study found that participants' self-image was lower if the mothers' educational levels were lower.

Furthermore, many of the variables in the emotional area not only related to each other, but also to variables in the academic domain. For example, attention is related to activity level in that an overactive child may also be less attentive. The lack of attention will influence academic performance in various ways, including a possible failure to note all the directions to complete an assignment and/or the details contained in a particular math or reading problem.

As with the findings in the academic area, some sort of intervention, growing out of further assessment of specific children, appears necessary to foster continued positive development. This intervention should not only involve the child, but also individuals in the home and the school.

While there is much to feel positive about in terms of ability, achievement and behaviour of the children who participated in this study, there is a need for supportive educational, emotional, behavioural and home programs. This support is particularly critical in the case of children of unmarried mothers who were 19 and under at the time of childbirth and who have 11 or fewer years education.

In general, the child of the younger, less-educated and unmarried mother is at greater risk for lower performance across a number of areas including ability, achievement, behaviour, self-image, hand/eye coordination and vocabulary than is the child of the older, married and more-educated mother. As well, the child of the younger unmarried less-educated mother is at a greater risk for difficulties than one would expect to find in the general population.

Thus, it is the area of mother's educational attainment that affords an opportunity for intervention. Indeed, the children of mothers, and the mothers themselves, who have achieved 11 or fewer years formal education, as well as those mothers who are unmarried at the time of childbirth are cause for considerable concern. Intervention to address the needs of these children and their mothers is essential.

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12 CHILDREN'S LEISURE AND HEALTH

Background Literature

In our society it is assumed that all children will engage in some form of leisure activity through play. Further, we expect children to be generally healthy and to have access to health-care facilities when necessary. Although these assumptions are appropriate to an economically-developed society such as Canada, and although we can point generally to the fact that children are engaged in play and have a high standard of health, we have surprisingly little detailed information on how children's leisure activities vary according to where they live, their family's circumstances, or how their health is affected by such factors which may, in turn, affect their progress in school.

Much of the available information is general in nature and does not allow for an understanding of the inter-relationships among factors that influence a child's overall well-being and development. There has, however, been concern expressed about such issues as the amount of time children spend watching television and the content of the programs they watch. A related issue is the concern about the apparent lack of physical activity on the part of children and the adverse consequences this can have on their health. On the other hand, the involvement of children in competitive sports may be seen as problematic because such activities may cater to only the most athletic children and may encourage too much aggression and competitiveness rather than other more socially-desirable values and behaviours.

Two recent studies on the leisure and health of Canadian children have begun to explore in more detail these aspects of children's lives, although further work in these areas is clearly necessary. One such study was designed to examine the health attitudes and behaviours of young Canadians.[1] A survey of more than 33,000 9-, 12- and 15-year-olds revealed that in many instances a strong relationship existed between the health attitudes of young Canadians and their behaviours.

In general, physically-active children were more likely to be self-confident, have a positive relationship with their parents and less likely to show symptoms of mental-health problems. Physically-active children were also more likely to be involved in a variety of other leisure-time activities. While the benefits of physical activity were evident, only 16.6 percent of the 9-, and

12-year-olds were involved in daily physical education classes. The effects of watching television on children remains a controversial issue, but watching between 15 and 30 hours per week did not appear to be related to negative health problems. Finally, there were few differences across Canada in the physical activity scores of the children or in the hours spent in most leisure-time activities.

In addition, a study by the Canadian Institute of Child Health reported that compared to other western countries, Canada needs to make a major commitment to the health and safety of its children if it is to match the achievements and standards of other countries.[2] While school-aged children between five and 14 years of age are relatively healthy compared to younger and older children, the Institute concludes that, "Lifestyle patterns and behaviours, dietary habits, exercise, physical activity and practices that prevent and protect children from injury are not increasing or building in a positive way".[3] It is also apparent that the health of children varies among the provinces with the poorer provinces having higher levels of health problems.

The data discussed in this Chapter is only a partial look at two important issues relating to the development of the children. Nevertheless, it does give an indication of the variations and similarities in the leisure activities of the children and of their contacts with the medical system, most noticeably The Izaak Walton Killam Hospital For Children. It is true, of course, that the health of the children cannot be adequately assessed simply by looking at these contacts. The information, therefore, must be seen as just one indicator of this aspect of the children's lives.

Results

Children's Leisure Activities

The mothers in this study reported on children's leisure-time activities by indicating the activities their children participated in, and the number of hours they spent on these activities in a week. Table 12.1 shows the children's participation rates according to their mothers' original age and marital status. As can be seen, there is a great deal of similarity among the groups in terms of the percentage of children who are involved in particular activities.

Virtually all children play with their friends and watch television during the week. Over 90 percent also read and nearly as many do homework. Most children also get help with their homework, the activity with the next highest level of

TABLE 12.1

Participation Rates of the Children in Leisure-Time Activities by the Mother's Original Age and Marital Status

	19 YEARS AND UNDER				20 YEARS AND OVER			
	Married	(n)	Unmarried	(n)	Married	(n)	Unmarried	(n)
Leisure Activity								
watching TV	98.9	(95)	100.0	(126)	99.5	(218)	100.0	(60)
reading	96.8	(95)	94.4	(126)	95.0	(218)	91.5	(59)
being read to	49.5	(95)	59.5	(126)	60.1	(218)	60.0	(60)
homework	94.7	(94)	89.7	(126)	95.4	(218)	91.7	(60)
being helped with homework	83.2	(95)	87.2	(126)	91.7	(218)	81.4[a]	(59)
play with friends	100.0	(95)	100.0	(126)	100.0	(218)	100.0	(60)
play alone	75.8	(95)	81.7	(126)	86.2	(218)	86.4	(59)
organized sports	29.5	(95)	39.7	(126)	46.1	(217)	41.7	(60)
lessons	23.2	(95)	26.2	(126)	54.6	(218)	33.3[b]	(60)
groups	52.6	(95)	47.6	(126)	64.2	(218)	51.7	(60)

[a]. Phi = .13, Significance of Chi-square < .05

[b]. Phi = .17, Significance of Chi-square < .01

participation (more than 80 percent in each group). Participation rates for playing alone are similar to those for being helped with homework; in all groups except the young married mothers over 80 percent of the children play alone during the week. For the young married mothers, 75.8 percent of their children play alone sometimes during the week. The majority of children are also read to, although the figures are considerably lower, and for the young married mothers the figure is just below 50 percent. These low levels of participation may reflect the children's increasing independence and the likelihood that they prefer to read by themselves.

In two of the seven dimensions discussed above there is a 10 percent variation in participation rates for the children in some groups. Thus, with respect to being helped with homework, the older married mothers' children have the highest level of participation, 91.7 percent, and the older unmarried mothers' children have the lowest, although still high, level of 81.4 percent. In being read to, the young married mothers' children have a participation rate of 49.5 percent while the other groups are at, or close to, 60 percent. For the other five dimensions, the variation is less than 10 percent and 60 to 100 percent of the children are involved in the activities. The three remaining activities — organized sports, taking lessons, and belonging to groups — show either lower levels of participation or greater variation in terms of participation.

Approximately 50 percent of the children belong to a group, such as Girl Guides, with the exception of the children of older married mothers, where 64.1 percent participate in this form of leisure-time activity. The children of these mothers also have a much higher level of participation in taking lessons of various kinds. For the young married and unmarried mothers, about a quarter of the children take lessons; for the children of older unmarried mothers, a third do so; and for the older married mothers' children 54.9 percent are engaged in lessons. The children of the three former groups are more likely to be involved in organized sports, while the reverse is the case for the children of the older married mothers. Nevertheless, the children of this latter group have the highest level of participation in organized sports although it is lower than their participation in taking lessons. For this group of children, which has the highest level of participation, 46.1 percent are involved in organized sports compared to 29.5 percent of the young married mothers' children, who have the lowest participation level.

While such variations may reflect the preferences of parents, having children participate in organized sports and lessons are more expensive forms of activity than some of the others previously discussed. Financial considerations, therefore, as well as a belief in whether it is important for children to be engaged in certain activities, likely affect the children's participation.

Considerable similarity among the children is also found for the hours per week which they spend on these activities (see Table 12.2). Children spend most time playing with friends and watching television (35-40 hours a week). These are clearly the activities that consume most of the 10-year-olds' leisure time since none of the other activities average even an hour a day.

Reading, playing alone and homework, each typically involve between 3.5 and 5.75 hours a week. With the exception of the children of young unmarried mothers, who spend just over two hours a week being helped with homework, no other activity involves, on average, more than two hours a week. Variations among children in the hours spent on different activities are small. In only three instances does the average time vary by an

TABLE 12.2

Average Hours per Week Spent by the Children in Leisure-Time Activities by the Mother's Original Age and Marital Status

	19 Years and Under				20 Years and Over			
	Married	(n)	Unmarried	(n)	Married	(n)	Unmarried	(n)
Leisure Activity								
watching TV	17.49	(95)	17.23	(126)	15.45	(218)	17.21	(60)
reading	5.86	(95)	5.70	(126)	5.21	(218)	5.33	(59)
being read to	1.54	(95)	1.67	(126)	1.32	(218)	1.53	(60)
homework	3.64	(95)	3.30	(126)	3.24	(218)	3.37	(60)
being helped with homework	1.99	(95)	2.51	(126)	1.83	(218)	1.88	(59)
play with friends	21.66	(95)	18.21[a]	(126)	20.15	(218)	18.72	(60)
play alone	3.65	(95)	4.72	(126)	4.81	(218)	5.26	(59)
organized sports	1.20	(95)	1.78	(126)	1.55	(217)	1.73	(60)
lessons	0.42	(95)	0.55	(126)	1.16	(218)	0.48[b]	(60)
groups	1.13	(95)	0.98	(126)	1.54	(218)	1.20	(60)

[a] $t = 2.18$, $p < .05$

[b] $t = 4.13$, $p < .01$

hour or more. The children of older married mothers spend less time watching television than the children of the other groups of mothers — from one and three-quarters to two hours a week less. On average, children are spending two to two and one-half hours per day watching television. The children of married mothers spend more time playing with friends than the children of unmarried mothers, a difference that is significant for the children of young mothers. With respect to playing alone, however, the situation is reversed, with children of unmarried mothers spending more time on this activity — 4.72 hours for the children of young unmarried mothers and 5.26 hours for the children of older unmarried mothers, compared to 3.65 hours and 4.81 hours for children of the married group.

These findings indicate that the children are generally engaged in a number of activities outside school that give them varied experiences. Although playing with friends and watching television are the most common and time-consuming activities, most children also do, and receive help with, their homework, and spend time by themselves either reading or playing. Only when such activities as belonging to groups, taking lessons, or participating in organized sports are considered do lower levels of participation and greater variation occur. It is also the case, however, that these types of activities take up a relatively small proportion of the time spent on leisure-time activities; the children typically are involved in such activities once during the week. Lessons, for instance, usually consume about half an hour a week, with the exception of the children of older married mothers who spend twice as much time in this activity. Because of this greater expenditure of time, there is a significant difference in this activity for the children of the older mothers.

While playing with friends or playing alone can involve different activities, it should be noted that these are the only activities most children were engaged in for reasonably long periods of time that might involve physical activity. Other activities, with the exception of sports and perhaps belonging to groups, are not likely to contribute to the physical well-being of the children. While fully comparable figures for children elsewhere in Canada do not exist, the *Canada Health Attitudes and Behaviours Survey: 9-, 12-, and 15-Year-Olds*, does provide a partial comparison.[4] The ages of the children in our study are between the 9- and 12-year-olds in the national survey. Looking at two common activities — watching TV and reading — it appears that the Nova Scotia children have similar patterns to children across the country (see Table 12.3).

TABLE 12.3

Average Hours per Week Spent by the Nova Scotia Children and the 9- and 12-Year Olds in a National Survey

Activity	Nova Scotia	(n)	9-Year Olds	12-Year Olds
watching TV	16.5	(499)	13.0	18.0
reading	5.5	(499)	6.9	7.5

With respect to watching television, the children in this study appear to be similar to the children elsewhere, with the figures for the Nova Scotia children falling between those for the 9- and 12-year olds. Reading, however, appears to be an activity that is engaged in to a lesser extent by the Nova Scotia sample than by children across the country.

Although the number of children in the study precludes detailed analysis of how leisure activities vary according to sex, an overview is possible. Table 12.4 shows the average hours per week children spend on activities according to their mothers' original marital status.

TABLE 12.4

Average Hours per Week Spent by the Children in Leisure-Time Activities by the Sex of the Child and the Mother's Original Marital Status

	Married				Unmarried			
Children:	**Male**	**(n)**	**Female**	**(n)**	**Male**	**(n)**	**Female**	**(n)**
Leisure Activity								
watching TV	16.53	(162)	15.58	(151)	16.31	(93)	18.13	(93)
reading	4.79	(162)	6.06[a]	(151)	4.16	(93)	7.01[b]	(93)
being read to	1.62	(162)	1.13[c]	(151)	1.77	(93)	1.47	(93)
homework	3.17	(162)	3.55	(151)	2.88	(93)	3.76[d]	(93)
being helped with homework	2.01	(162)	1.72	(151)	2.77	(93)	1.84	(93)
play with friends	20.58	(162)	20.63	(151)	19.22	(93)	17.53	(93)
play alone	4.94	(162)	3.93[e]	(151)	4.47	(93)	5.32	(93)
organized sports	2.23	(162)	0.60[f]	(151)	2.58	(93)	0.95[g]	(93)
lessons	0.80	(162)	1.07	(151)	0.53	(93)	0.52	(93)
groups	1.24	(162)	1.59	(151)	0.88	(93)	1.22	(93)

[a] t = -2.61, p < .01

[b] t = -4.08, p < .001

[c] t = 2.29, p < .05

[d] t = -2.46, p < .05

[e] t = 2.06, p < .05

[f] t = 6.69, p < .001

[g] t = 2.82, p < .01

The time spent on the various activities does not shift noticeably on most dimensions in comparison with the figures in Table 12.2. Nevertheless, there are seven statistically significant relationships. Girls spend considerably more time reading, a finding consistent across both the married and unmarried categories. A similar consistency is found with respect to organized sports, but here the boys spend more time. With respect to other significant findings, the girls of married mothers spend less time being read to and playing alone than do the boys, while the girls of unmarried mothers spend more time on their homework, than their male counterparts. Boys from both groups of mothers spent less time on their homework than do the girls, but this is particularly noticeable for the boys of unmarried mothers.

Children's Health

As explained in the Methodology chapter, part of this study involved an analysis of the use of the emergency and regular services of The Izaak Walton Killam Hospital For Children (IWK) by mothers living in Halifax County. This is the medical facility where most mothers within Metropolitan Halifax and Halifax County would likely take their children for emergency treatment or hospitalization. Taking the names of the mothers who lived in this area at the time of the third interview in 1979-1980 and those who lived in the area when the fourth interview was completed in 1988, the Hospital records were searched to determine which children had received treatment.

This search identified 221 children who had been admitted or received emergency treatment at least once between 1978-1988. Records indicated that of the 221 children, 210 had visited the emergency department and 106 had been admitted. Matching Hospital records with information from the mothers' questionnaires indicated that when the children were born, 11.8 percent of the mothers were 20 or older and married; 30.3 percent were 20 or older and unmarried; 40.3 percent were 19 years of age or younger and married; and 17.6 percent were 19 years of age or younger and unmarried.

Additional information obtained from the mothers' questionnaires indicated that more than 110 of the 221 mothers had moved outside Halifax County for some period of time during the 10- year period. Since almost half of the mothers spent time living outside the County many of the children in this sample could have experienced hospital care at a medical facility other than the IWK. This implied that many of the IWK's records would not represent a complete record of the children's hospital visits and admissions. In addition, of the 59 mothers who had remained within Halifax County during the 10-year period, 40 mothers were in the 20 and over and married category (see Table 12.5).

These figures indicated an extremely unbalanced amount of movement in and out of Halifax County across age and marital status categories, which also suggested that the Hospital records were most complete for the 20 and older married group.

Table 12.5

Number of Mothers Remaining in, or Moving Outside the Halifax County Area Between 1978 and 1988, by Mother's Original Age and Marital Status

	19 YEARS AND UNDER		20 YEARS AND OLDER	
	Married	Unmarried	Married	Unmarried
Remained in Halifax County	7	8	40	4
Moved outside Halifax County	15	37	37	21
n =	(22)	(45)	(77)	(25)

Total n = 169 (the movement history of 52 of the mothers was unknown)

Therefore, in reporting information from the Hospital data, it is important to note that some aspects of the analysis may have been affected by these factors.

In addition to the IWK records, information was also collected from the mothers' questionnaires on their children's health. From these two sources — the Hospital records and the mothers' questionnaires — information was gathered on: (a) the types of health-care facilities used by the mother when the child was ill (b) the number of emergency visits and admissions at the IWK (c) the age of the child during emergency visits and admissions (d) the length of hospital stays after admissions (e) the types and severity of medical problems, and (f) the types of treatment provided by the hospital.

Although few mothers in the study had chronically-sick children, it is worth noting that when mothers have to cope with sick children it is an all-consuming task. While medical care is available on an emergency or regular basis, e.g., attendance at clinics, it is the mothers who take responsibility for the care of the children on a daily basis. The mothers report not only the constant worry about their child's health but worry about the additional costs associated with the care, costs which can be related to the extra heating needed in the home or transportation to hospital as well as the direct medical costs of drugs or equipment. Because of the constant care required by the children who have chronic illnesses, mothers have to forgo any notion of employment outside the home. While the family may be financially viable if the mother is married, a mother with a sick child who has no partner has virtually no alternative but to live on social assistance and virtually no prospects of becoming financially independent while she is responsible for childcare.

As reported on the questionnaire, Table 12.6 reveals how frequently the mother contacted the family doctor, a public health nurse, hospital clinic or hospital emergency department when their child was ill. The family doctor was the most frequently contacted, with an average of 41.2 percent of all age and marital status groups reporting they "always" contacted the family doctor. In contrast, the hospital emergency department (2.9 percent), hospital clinic (2.7 percent) and the public health nurse (0.4 percent) received considerably lower ratings.

TABLE 12.6

Mother's Report of Health Care Facilities Contacted for Child, by Mother's Original Age and Marital Status

FAMILY DOCTOR

	19 YEARS AND UNDER		20 YEARS AND OVER	
Mother's Rating	**Married**	**Unmarried**	**Married**	**Unmarried**
Never	0.0%	0.0%	0.9%	0.0%
Not Very Often	4.9	2.3	8.1	4.2
Sometimes	18.4	22.0	23.9	9.9
Usually	40.8	26.5	42.3	31.0
Always	35.9	49.2	24.8	54.9
n =	(103)	(132)	(234)	(71)

HOSPITAL EMERGENCY DEPARTMENT

	19 YEARS AND UNDER		20 YEARS AND OVER	
Mother's Rating	**Married**	**Unmarried**	**Married**	**Unmarried**
Never	26.2%	18.9%	14.2%	16.9%
Not Very Often	38.8	36.4	40.9	38.0
Sometimes	33.0	32.6	36.2	31.0
Usually	1.9	7.6	6.9	8.5
Always	0.0	4.5	1.7	5.6
n =	(103)	(132)	(232)	(71)

CONTINUED

Table 12.6 continued

HOSPITAL CLINIC

	19 YEARS AND UNDER		20 YEARS AND OVER	
Mother's Rating	**Married**	**Unmarried**	**Married**	**Unmarried**
Never	48.5%	45.5%	50.4%	45.1%
Not Very Often	19.4	23.5	28.0	25.4
Sometimes	23.3	20.5	18.5	19.7
Usually	6.8	8.3	1.7	4.2
Always	1.9	2.3	1.3	5.6
n =	(103)	(132)	(232)	(71)

PUBLIC HEALTH NURSE

	19 YEARS AND UNDER		20 YEARS AND OVER	
Mother's Rating	**Married**	**Unmarried**	**Married**	**Unmarried**
Never	74.8%	70.5%	76.5%	73.2%
Not Very Often	20.4	15.9	17.5	18.3
Sometimes	4.9	11.4	4.7	8.5
Usually	0.0	1.5	0.4	0.0
Always	0.0	0.8	0.9	0.0
n =	(103)	(132)	(234)	(71)

Despite these figures, the IWK records indicated that 210 of the mothers visited the emergency department more than 1,289 times during the 10-year period with a range of 1-48 visits per child. The average number of emergency visits was highly similar for the 19 and under, married and unmarried groups (6.7 and 7.1 visits) and the 20 and over unmarried group (7.6 visits). The one exception was the 20 and over married group, which had an average of only 4.5 visits.

The difference in the average number of emergency visits of the older married mothers is noteworthy because the records for this group are the most complete. Despite the likelihood, therefore, that more older married mothers could have accessed the IWK the average number of visits is the lowest.

From both data sources it was possible to calculate the average number of hospital admissions for the children by the mothers' original age and marital status. The results were highly similar, showing an average of 2.3 admissions per child from the Hospital records and 2.8 admissions per child as reported by the mothers. Although slightly higher admissions rates were obtained from the Hospital records for the younger and older unmarried groups, this trend was not consistent with the results reported by the mothers. However, these differences may have simply resulted from possible inaccuracies in the hospital records collected from the IWK.

In contrast to these results, the average length of stay for the children in the IWK showed large differences between the married and unmarried groups for both age categories. The average length of admissions for the children of the 19 and under and married mothers was 1.9 days compared to 4.5 days for the 19 and under and unmarried group. Similar results were obtained for the 20 and older age group, with an average of 2.8 days for married mothers and an average of 5.2 days for unmarried mothers. These results suggest that the children of the unmarried mothers may have required, on average, a longer period of treatment and recovery in the IWK than the children of the married mothers.

In addition to the length of admissions, the severity of health disorders experienced during emergency visits and admissions was also obtained from the IWK records (see Table 12.7). For the emergency visits, the most frequently-rated response was "not very severe" with between 60 percent and 77 percent of the

TABLE 12.7

Severity of Emergency Visits and Hospital Admissions for Children, by Mother's Original Age and Marital Status

EMERGENCY VISITS

	19 YEARS AND UNDER		20 YEARS AND OVER	
	Married	Unmarried	Married	Unmarried
Very Servere	1%	3%	3%	1%
Moderately Severe	21	34	30	16
Not Very Severe	77	60	67	75
Social Admission	0	1	0	1
Parenting Problem	1	2	0	7
Number of Emergency Visits =	(162)	(465)	(382)	(280)

n = 210 children

CONTINUED

Table 12.7 continued

HOSPITAL ADMISSIONS

	19 YEARS AND UNDER		20 YEARS AND OVER	
	Married	**Unmarried**	**Married**	**Unmarried**
Very Severe	0%	9%	3%	0%
Moderately Severe	13	56	36	46
Not Very Severe	84	31	61	54
Social Admission	0	4	0	0
Parenting Problem	3	0	0	0
Number of Hospital Admissions =	(31)	(100)	(72)	(46)

n = 106

ratings occurring in this category for all groups. Although the severity ratings for the emergency visits revealed no major differences between the groups, the severity ratings for the Hospital admissions did indicate an effect by marital status.

For the 19 and under unmarried group, 56 percent of the ratings were reported as "moderately severe" in contrast to only 13 percent reported as "moderately severe" for the 19 and under married group. This effect was not as strong for the 20 and over category, for whom 36 percent of admissions were rated as "moderately severe" for the married group compared to 46 percent for the unmarried group. It is instructive to note that these results closely parallel the extended length of stay experienced by the children of the unmarried mothers. These facts suggest that the children of unmarried mothers were at a somewhat greater health risk than the children of the married mothers.

Tables 12.8 and 12.9 list the categories of emergency diagnoses and Hospital discharge diagnoses[5] for the children by the mother's original age and marital status. These Tables provide only diagnostic categories due to the large number of individual diagnoses for the children. A complete list of all the diagnoses obtained from the IWK records is provided in Appendix C.[6]

For both the emergency and Hospital discharge diagnoses, the most frequently-occurring health problem experienced by the children occurred under diagnostic category D-II consisting of childhood illness such as viral flu, colds, infectious and parasitic diseases. These results were consistent across all groups

TABLE 12.8

Emergency Diagnoses for Children, by Mother's Original Age and Marital Status

		19 YEARS AND UNDER		20 YEARS AND OVER	
Diagnostic Category		**Married**	**Unmarried**	**Married**	**Unmarried**
D-I	Accidental Injury	20%	18%	24%	20%
D-II	Childhood Illness	52	51	50	55
D-III	Medical Tests	6	3	4	4
D-IV	Assault Abuse	0	0	0	0
D-V	Non-Medical Problem	3	3	5	5
D-VI	Congenital Anomalies	0	1	0	1
DVII	Lower Respiratory	6	16	9	4
D-VIII	Ill-Defined Conditions	13	8	8	11
Number of Emergency Diagnoses =		(183)	(538)	(426)	(318)

n = 210 children

TABLE 12.9

Hospital Discharge Diagnoses for Children, by Mother's Original Age and Marital Status

		19 YEARS AND UNDER		20 YEARS AND OLDER	
Diagnostic Category		**Married**	**Unmarried**	**Married**	**Unmarried**
D-1	Accidental Injury	11%	4%	2%	1%
D-II	Childhood Illness	59	42	58	52
D-III	Medical Tests	0	4	3	3
D-IV	Assault Abuse	0	0	0	0
D-V	Non-Medical Problem	7	5	1	12
D-VI	Congenital Anomalies	2	7	13	19
D-VII	Lower Respiratory	5	33	15	6
D-VIII	Ill-Defined Conditions	16	5	8	7
Number of Emergency Diagnoses =		(44)	(130)	(87)	(68)

n = 106 children

indicating no major differences in the kinds of health problems experienced by the children.

In addition to the manual search of the IWK records for the children's discharge diagnoses, a computerized search was conducted by the Nova Scotia Department of Health and Fitness. This search resulted in the primary discharge diagnoses for children in this study and for all children in the general population of Halifax County between 1979 and 1988. The primary discharge diagnoses for all children in Halifax County was collected to ascertain if any anomalies existed in the population of children investigated in this study. Table 12.10 gives the Hospital discharge diagnoses for the 973 children in the general population of Halifax County and the diagnoses for the children in the study population. The actual types of diagnoses used by the Department of Health and Fitness are given in Appendix D.[7]

TABLE 12.10

Hospital Discharge Diagnoses for Children in Study Population and General Population in Halifax County

Diagnostic Category		Study Population	General Population (Halifax County)
D-I	Accidental Injury	7%	7%
D-II	Childhood Illness	55	59
D-III	Medical Tests	6	3
D-IV	Assault Abuse	0	0
D-V	Non-Medical Problems	7	3
D-VI	Congenital Anomalies	7	5
D-VII	Lower Respiratory	16	20
D-VIII	Ill-Defined Conditions	2	3
Number of Admission Diagnoses =		(368)	(2628)
n (number of children) =		(106)	(973)

As with the results of the IWK records, the most frequently-occurring health problem experienced by the children in the general population of Halifax County and the children in this study occurred under diagnostic category D-II, childhood illnesses. These results strongly suggest that no major differences existed in the types of hospital discharge diagnoses experienced by the children in the general population of Halifax County and those in the study population.

Table 12.11 gives the emergency and Hospital treatments for the children in this study by the mother's original age and marital status. The actual types of medical treatment, obtained from the IWK records, are found in Appendix E.

For emergency visits, the types of treatment administered to the children involved categories T-B (e.g., ice packs and physiotherapy) or T-D (e.g., tests and observation) independent of the mother's original age and marital status. Although the Hospital treatments were, in the majority of cases, similar to the emergency treatments, numerous cases occurred in the T-C category (operations), which simply reflected the fact that surgical procedures were only performed following admission.

The IWK data indicate that none of the children were diagnosed as having been physically or sexually abused. This finding confirms the information given by the mothers in their interviews and is further supported by a check of the provincial Child Abuse Register. In reviewing the Register, the authorities responsible for maintaining the records indicated that none of the children and mothers in this study were listed.

Many mothers have been in contact with the child welfare authorities, however. For the young mothers, 40.5 percent of the unmarried mothers and 20.8 percent of the married mothers had been in contact with the Children's Aid Society or other child welfare agency (Phi = 0.21, significance of Chi-square < 0.01, n = 222). Among the older mothers, only 5.9 percent of the married group had had such contacts, while 45.0 percent of the unmarried mothers had (Phi = 0.46, significance of Chi-square < 0.0001, n = 279). These contacts were typically brought about because of the mother's financial circumstances and need for assistance. In order to qualify for the financial assistance, an assessment of the home situation and the care provided for the children was often required.

Considering only those types of assistance directly related to the behaviour and health of the child — for example, child guidance centres, mental health clinics, school psychologists, social workers or speech therapy clinics — the numbers of mothers who have had such contacts drops significantly. The percentage of mothers who have been involved with these agencies is quite similar, irrespective of their original marital

TABLE 12.11

Medical Treatments Given During Emergency Visits and Hospital Admissions to Children, by Mother's Original Age and Marital Status

EMERGENCY VISITS

	19 YEARS AND UNDER		20 YEARS AND OLDER	
Treatment Codes	**Married**	**Unmarried**	**Married**	**Unmarried**
T-A Physiotherapy	7%	9%	8%	10%
T-B Medications	32	36	35	33
T-C Operation	0	0	0	0
T-D Medical Tests	39	31	38	31
T-E Stitches/Cast	7	4	8	5
T-F Advise Patient	15	19	11	21
T-G Psychological Tests	0	0	0	0
Number of Emergency Treatments =	(223)	(684)	(496)	(406)

n = 210 children

HOSPITAL ADMISSIONS

	19 YEARS AND UNDER		20 YEARS AND OLDER	
Treatment Codes	**Married**	**Unmarried**	**Married**	**Unmarried**
T-A Physiotherapy	0%	14%	5%	4%
T-B Medications	20	40	32	22
T-C Operation	21	11	39	30
T-D Medical Tests	43	24	21	16
T-E Stitches/Cast	4	1	0	0
T-F Advise Patient	8	9	3	15
T-G Psychological Tests	4	1	0	13
Number of Emergency Treatments =	(51)	(166)	(87)	(77)

n = 106 children

status and age (see Table 12.12). Only the higher use of other groups by the older unmarried mothers in comparison with the older married mothers is of note. (These groups include a wide variety of different organizations, ranging from church contacts to specialized support groups, such as Christmas Daddies and Big Brothers.)

TABLE 12.12

Percentage of Mothers Who Have Had Contact with Agencies to Assist Children, by Mother's Original Age and Marital Status

	19 YEARS AND UNDER		20 YEARS AND OLDER	
Agencies	**Married**	**Unmarried**	**Married**	**Unmarried**
Children's Aid Society	20.8	40.5[a]	5.9	45.0[b]
Child Guidance Clinic	10.4	10.3	8.2	15.0
Child Mental Health Clinic	9.4	7.9	4.6	8.3
School Psychologist	6.3	7.1	8.7	15.0
Other	9.4	12.7	5.9	16.7[c]
n	(96)	(126)	(219)	(60)

[a]. Phi = 0.21, Significance of Chi-square < .01
[b]. Phi = 0.46, Significance of Chi-square < .0001
[c]. Phi = 0.16, Significance of Chi-square < .01

In summary, the information on the children's well-being indicates that most children are active in a variety of leisure-time pursuits and are healthy. While the children have generally similar patterns of activities, the children of the older married mothers are most likely to be involved in activities outside the home and to be encouraged to participate in sports, organized groups and out-of-school lessons. That these opportunities are tied in part to the financial situation of the mothers appears most likely and is reinforced by the higher level of contacts that the unmarried and young mothers have had with child welfare organizations.

The health of the children in this study appears to be comparable to the health of the children in the region. Data from the IWK, however, suggests that further study of the health of some subgroups of children would be appropriate, since it is not clear, for instance, whether longer hospital stays are related to the poorer health of some children or whether it is the Hospital's response to mothers who have limited financial means and support systems so that it is more difficult for them to arrange to take care of the children once discharged. Under these conditions, the children stay in hospital longer for social and economic reasons rather than strictly medical ones.

Footnotes

1. King, Alan J.C., Alan S. Robertson, and Wendy W. Warren. *Summary Report: Canada Health Attitudes and Behaviours Survey, 90, 12-, and 15-Year Olds, 1984-85.* Minister of National Health and Welfare, 1985.

2. Avard, D. and L. Harvey. *The Health of Canada's Children: A CICH Profile.* Canadian Institute for Child Health, 1989.

3. Avard, D. and L. Harvey. 1989, p. 53.

4. King, A.J.C., A.S. Robertson, and W.W. Warren. 1985.

5. "Hospital discharge diagnosis" refers to the diagnosis assigned during discharge from the hospital and not during admission.

6. The development of the diagnostic and treatment categories was completed by a qualified nurse during the manual search of the IWK Hospital records. The final list of categories was reviewed by the Advisory Board of the Mothers and Children Project.

7. Since the primary discharge diagnoses collected by the Nova Scotia Department of Health were coded using the ICD-9 diagnostic coding system, they were not directly comparable to the IWK Hospital records. Therefore, translating between the ICD-9 codes and the diagnostic categories used in this study resulted in slightly different diagnoses being included in each category.

13 SUMMARY AND RECOMMENDATIONS

This study provides substantial information about the lives and circumstances of the mothers and children who participated in the research. Here an overview of the findings is presented along with a discussion of the policies and programs that affect mothers and children. There is also a series of recommendations considered necessary to meet the needs of many families with young children.

The study began in 1978 in response to concern among medical and social services personnel about young unmarried mothers. In contrast with previous decades, unmarried teenage mothers in the 1970s were raising their children rather than placing them with adoption agencies. Concern was expressed about the capacity of these young mothers to properly care for their children, since they were often unprepared for motherhood and had limited personal support and financial resources. At the same time, concern was also expressed about the mothers themselves; early motherhood may well mean the curtailment of future career plans and heavy reliance on family and social assistance programs.

To investigate these tentative and incomplete conclusions, Health and Welfare Canada and the Nova Scotia Department of Community Services joined in a study of mothers who had their first child between July, 1978 and February, 1979. The mothers were divided into two groups by marital status. The first part of this study, covering the child's first 18 months, indicated that most unmarried mothers were coping well. Children were generally receiving appropriate care and the mothers were adjusting to their changed circumstances. Many of the worst fears about these mothers and the consequences for their children were laid to rest.

The opportunity to revisit the mothers when their children were approximately 10 years old allowed further exploration of the families' circumstances and an examination of whether there were longer-term problems associated with being an unmarried mother. For the 10-year follow-up conducted in 1988-1989, the sample was further divided by the mother's age at the time of her child's birth: those aged 19 and below representing the "young" mothers; those 20 and above representing the "older" mothers. This second division thus produced four comparison groups: young married, young unmarried, older married and older unmarried mothers. Any discussion of the mothers' age and marital status refers to the time when their first child was born.

The Children

The generally positive outcome of the children's development puts to rest a great deal of concern and speculation about how well children of young mothers, particularly children of unmarried teenage mothers, develop compared to children born into two-parent households. The study shows that mothers share similar experiences raising their children, e.g., constraints on their time and access to childcare, while differences occur not because one group is more devoted but because of the circumstances in which the families live. Indeed, the dedication and consideration of the mothers for the well-being of their children is impressive.

It is evident that not all children develop equally well. A comprehensive assessment of a subsample of 223 children allowed researchers to determine how well the children were developing intellectually and socially. While overall the children exhibited average ability, the range of intelligence test scores ran from 45, indicative of serious developmental delay, to an impressive 142. This range is representative of a "normal" sample but raises a serious concern: 14 percent scored below average in verbal intelligence and 10 percent scored below average on the full scale IQ — regardless of the marital status of the mother.

Nevertheless among the children, it is noteworthy that on verbal comprehension children of older mothers scored significantly higher than children of younger mothers. This tendency was true with regard to both vocabulary and reading achievement. In particular, a higher percentage of children born to young unmarried mothers exhibited significantly lower performances but, as a group, their scores were not significantly lower than the normal average range of scores, indicating that many of the children performed at expected and acceptable levels.

The trend toward lower performance by the children of unmarried mothers was also evident in teachers' perceptions of the children's behaviour. For example, children of young unmarried mothers were perceived as more socially withdrawn, less attentive and more aggressive. In general, the young unmarried mothers themselves reported more concerns about their children's activity and aggression levels. While the children as a group were within the normal range in terms of assessments of their behaviour, the children of the unmarried mothers were at some risk with respect to emotional and behavioral problems. Previous studies found that as children grow older and enter their teens their levels of aggression and behavioral-related concerns tend to become more problematic. As well, activity level and attention difficulties that were manifested may be related to difficulties in academic learning as the children enter the higher grades in school. Given that children in this study are now entering a more challenging phase in school, these concerns may well intensify.

The care the children receive outside school hours is primarily dependent on the care given by the mothers and the nature of the mother-child interactions. Although most mothers receive help from husbands, relatives and others, virtually all mothers spend more time with the children than any other caregiver — an average of 5.25 hours on school days, 10.2 hours on Saturdays, and 10.5 hours on Sundays. Not surprisingly, husbands are the next group most involved in childcare, with most of them helping an average of 3.5 hours on weekdays, more on weekends.

Looking at childcare through three periods — birth to two years of age, age two to school, and since starting school — assistance from relatives (excluding husbands) is apparent. Close to 80 percent of all mothers received and continued to receive such help from relatives. In the earliest stage, unmarried mothers receive more assistance, particularly the young unmarried mothers. As the child grows up, young mothers continue to receive somewhat more help, although the differences with respect to age and marital status are not large.

While assistance from relatives is fairly constant, the use of babysitters and daycare facilities changes considerably during the child's first 10 years. Mothers, for instance, use babysitters to a greater extent as children grow up — 42.9 percent doing so when the child is under two, 58.0 percent when the child is between two and school age, and 73.6 percent when the child is in school — and married mothers are more likely to use babysitters during each period. Indeed, the older married mothers stand out because of their heavier reliance on babysitters. Daycare, provided by private and non-profit centres, full and part-day programs, summer camps and other formalized arrangements, is used little when the child is under two (4.4 percent) or when the child is in school (8.2 percent). The greatest use, by 50.6 percent of the mothers, occurs when the child is between two and five. The older married mothers are, again, most likely to use such arrangements (61.2 percent), followed by the older unmarried (50.0 percent), the young unmarried (41.3 percent), and the young married mothers (39.6 percent).

These findings suggest that the networks mothers can call on for assistance are not extensive. Mothers can usually call on more relatives than babysitters and have limited access to more than one daycare facility. While the number of relatives available does not change noticeably as the child grows up, the number of available babysitters does increase. Three-quarters of the mothers indicated they had few if any difficulties with childcare arrangements. Those who had difficulties (which were not related to age or marital status) cited as problems the quality and cost of care and a lack of relatives and friends in the area. The number of arrangements made by mothers indicates they were able to cope without having to involve an excessively high number of helpers. It is noticeable, however, that the unmarried mothers are at the extremes in this respect. More of the unmarried mothers had two or fewer helpers and more had a larger number of people who had assisted, that is seven or more.

The mothers' responses on the question dealing with their interaction with their children indicated that mothers typically responded in appropriate ways. The responses of the mothers tended to be very similar irrespective of their original age and marital status with only a few items suggesting that one category of mothers treats their children differently. Married mothers, for instance, especially older married mothers, appear to encourage their children's decision-making more than unmarried mothers. Conversely, unmarried mothers are more likely to follow-up with their children during the day and check on what they are doing.

All groups of mothers though, show some inconsistency with respect to managing their child's behaviour. Thus mothers report remembering the rules they set but not necessarily standing by them. Older unmarried mothers, however, are noticeable for their use of guilt in controlling their children. Overall, the mothers seem well aware of interacting with their children so as to encourage the child's development. It must be remembered however, that in an interview mothers are simply stating what they do. Such reports may reflect what mothers think are appropriate answers, as well as what they actually do. Since it was not possible to observe the mother-child interactions, it is not possible to determine how closely the mothers' reports reflect their actions.

The general well-being of the children is reflected in the variety of their leisure-time activities. All the children have similar patterns, with a high percentage watching television, playing with friends, reading, doing homework and playing alone. Far fewer children are engaged in after-school lessons, organized sports and clubs, such as Cubs, Girl Guides and church groups. More than 50 percent of the children of older married mothers participate in lessons and groups, but other groups of children have much lower participation rates, e.g., only 25 percent of the young mothers' children take lessons. The older married mothers' children also have the highest level of participation in sports — 46.1 percent. It is not surprising that these mothers are more likely to support participation in organized activities since they are frequently better able to bear the costs of these programs. With respect to the amount of time spent on other activities, though, there are few differences among the four groups of children. Television and playing with friends consume the most time, 2.4 and 2.9 hours a day respectively, with all other activities averaging less than an hour a day.

The health of the children, assessed through interviews with the mothers and an analysis of the records of The Izaak Walton Killam Hospital For Children (IWK), indicates that the experiences of children in this study are similar to those of children of the same age in the Halifax area. While the majority of children do not come in contact with the Hospital, those who do are generally there for typical childhood complaints and accidents. None of the children in this study received medical treatment or were reported to the provincial authorities for abuse. Although the data from the IWK are difficult to interpret because they are not a complete record of all hospital contacts, there is an indication that the children of older married mothers have fewer visits to the emergency department (average 4.5) than children from the other groups (average 7.0).

With respect to the number of admissions, all groups have similar levels of admissions but the length of hospital stays ranges from 1.9 days for children of young married mothers, to 4.5 for young unmarried, to 2.8 for older married, and to 5.2 days for older unmarried mothers. The number of days in Hospital may well be related to the severity of the children's illness since unmarried mothers' children have a higher rate of moderately severe diagnoses. These findings suggest the need for a more comprehensive study of children's health, including the support and assistance available to mothers whose children are chronically ill. Such mothers appear to have few options but to dedicate all their time to their children.

Despite the care given to the children, a high percentage of mothers have been in contact with child welfare agencies, particularly among the unmarried mothers. The older unmarried mothers have the highest rate of contact, 45.0 percent; followed by young unmarried mothers, 40.5 percent; then young married mothers, 20.8 percent; and finally older married mothers, 5.9 percent. This underlines the fact that while the majority of children are well cared for, many are living in families whose circumstances are extremely difficult.

The Mothers

Many of the mothers experienced significant changes in their lives over a 10-year period. While many of these changes, such as better housing, more social support and satisfactory marriages, were definitely improvements, the differences among the groups of mothers is at times noticeable, indicating that their age and marital status at the time their first child is born have lasting effects.

Family Composition

Having a child prior to marriage is not a barrier to subsequent marriage for most of the unmarried mothers. Over the 10 years, 81 percent of the unmarried mothers changed their marital status with young unmarried mothers more likely to enter a relationship (87.3 percent) than older unmarried mothers (69.4 percent). Conversely, 18.2 percent of the originally-married mothers terminated their marriages. Young married mothers have a higher rate of marital dissolution (29 percent) than older married mothers (16 percent). In looking at all the mothers who were married at some time during the 10-year period, it is the older unmarried women who have the highest level of marital instability, followed by the young unmarried, young married and older married mothers.

Despite concerns that young unmarried mothers would have higher than average birth rates, the data definitively reject this supposition. Married mothers have an average of 2.30 children and unmarried mothers 2.01. Those mothers who never married had an average of 1.55 children, versus 2.40 for the mothers who were married throughout the study. Older unmarried mothers are unlikely to have more than two children and unmarried mothers also wait a longer time before having a second child (5.2 years) than married mothers (4.4 years).

At the time their first child was born, 58.6 percent of the unmarried mothers lived with their parents. Over the years they moved into independent households, either through marriage or by establishing a separate household with their child. Most married mothers (88.3 percent) took their child home to a household that included only the mother, her husband and the child, with the remainder sharing accommodation with parents or other family members. Thus, while households containing just the mother, her husband and children increased from 54.9 percent to 78 percent, mother/child/mother's parents or other family households decreased from 32.0 percent to 2.7 percent and mother/child households increased from five percent to 13.7 percent. This latter finding is mainly due to the fact that married mothers ended their marital relationships and moved into independent households.

Social Relations

It is evident that over the 10 years most mothers established networks of friends or relatives who could be called upon for advice or help. When the children were very young, mothers saw themselves as solely responsible for the children. Despite the fact that 61.6 percent of the sample was married in 1978-79, 72 percent of all mothers said they were sole caretakers. However, this figure decreased to 17.4 percent by 1988-89, although the variation among the groups is quite striking: 38 percent of the older unmarried mothers indicated they were still solely responsible for their children, 21 percent of the young married, 19 percent of the young unmarried, and 8.5 percent of the older married mothers. Most mothers said they always or nearly always had someone they could call on for specific help. Close to two-thirds of the young and older married mothers were in this position as opposed to 51 percent of the older unmarried mothers. Older unmarried mothers were also more likely to experience loneliness. At the same time, it is these older unmarried mothers who report the most difficulty having time to themselves.

Except for church affiliation, a minority of mothers were involved in organized activities. The older married mothers are distinctive in their church affiliation since 82.2 percent of them, compared to approximately 60 percent of the other groups, are church members. These latter groups of mothers also have 15 percent or fewer mothers involved with church groups, while the older married mothers again have higher rates of participation (25 percent). Community groups, such as the Lionettes and home and school associations, involved less than a quarter of the mothers, with the young unmarried mothers' involvement noticeably low (7.8 percent). Organized groups, including sports, dance and musical groups, have a somewhat higher participation rate — between 25 and 33 percent of mothers taking part.

With respect to leisure activities, mothers report various levels of difficulty in being involved in such undertakings. Just under 19 percent of the older unmarried mothers report they always have difficulties as opposed to 12-14 percent of the others. For out-of-home activities, a lack of childcare and a lack of money are the most-cited reasons for not pursuing such activities. Older married mothers indicate lack of childcare is the major barrier, while unmarried mothers stress lack of money. Older unmarried mothers report being equally hampered by both factors. For at-home leisure activities, mothers state that lack of childcare is again a major issue, followed by lack of time due to work commitments.

Perceptions of Life

The mothers in this study, in line with the general population, show high levels of satisfaction on 12 discrete dimensions relating to their lives and an overall summary dimension dealing with life as a whole. The 12 discrete dimensions included in this study were: health, finances, family relationships (excluding husbands and children), paid employment, friendships, housing, husband, recreational activities, religion, self-esteem, transportation and education.

Only on the education dimension is there a majority who are not satisfied — the unmarried mothers. Nevertheless, on nine of the 13 dimensions, the young married mothers indicated they were more satisfied than the young unmarried mothers. The family dimension was the one dimension where the unmarried mothers were more satisfied than the married. For the older mothers, the married group was more satisfied on 11 of the 13 factors. On housing, employment, education and finances, the older married mothers showed significantly higher levels of satisfaction than the older unmarried mothers.

In comparing their circumstances now with 10 years ago, the unmarried mothers reported greater improvement than the married mothers on 10 of 13 dimensions. Differences are particularly noticeable on health, family relations, husband, housing, transportation and life in general. Overall, young unmarried mothers report the most improvements, followed by the young married, the older unmarried and the older married mothers. Despite noticeable improvements over the past 10 years, some mothers in each of the four groups have experienced worsened circumstances. In particular, the older unmarried group reports the most deterioration in their circumstances.

A final summary of the mothers' sense of well-being was gained from the Memorial University of Newfoundland Scale of Happiness (MUNSH). Although the four groups of mothers could all be classed as happy, the unmarried mothers' scores were significantly lower than those of the married mothers in both age groups.

With respect to satisfaction and changes over 10 years the findings speak to the mothers' feelings and perceptions but do not give an indication of their objective circumstances. It is these objective circumstances that will be addressed in the following sections.

Housing

As the summary on family composition indicates, most of the unmarried mothers lived with their family after the birth of their children, in contrast with married mothers, most of whom had established their own households. These figures are reflected in the home ownership figures; 56 percent of the married and four percent of the unmarried mothers owned a house when their first child was born. By 1988-89, 86 percent of the married and 47 percent of the unmarried mothers owned a home. Fifty-one percent of the unmarried mothers are dependent on rental accommodation but only 12 percent of the married. Again, because of their living arrangements, 42 percent of the unmarried mothers experienced overcrowding 10 years ago, compared to six percent of the married mothers. These figures subsequently declined to seven percent and one percent, respectively.

Because of these changes, unmarried mothers report considerable improvement in their housing over 10 years, but they are still somewhat less satisfied than their married counterparts. This may be related to the fact that more of the unmarried mothers (33 percent) spend at least 30 percent of their income on housing, compared to 14 percent of the married mothers. Further, the unmarried mothers have experienced less stability in their living arrangements. For instance, 29 percent of the married and 10 percent of the unmarried mothers have lived in the same house for the last 10 years. Conversely, 48 percent of the unmarried and 15 percent of the married mothers moved more than three times. Overall, the unmarried mothers have an average of 3.7 moves as opposed to 1.7 for the married mothers.

Education

Unmarried mothers have lower levels of education — and this is not simply a function of age. For the younger unmarried mothers their education is often curtailed by an unplanned pregnancy, although these mothers plan to continue their education to a greater extent than the older unmarried mothers. Mothers in this latter group most typically dropped out of school, often with relatively low levels of educational attainment, and became pregnant later.

In 1979, 64 percent of the married mothers had a high school diploma, 54 percent of them had studied beyond high school and 65 percent were qualified to practice a trade or profession. For the unmarried mothers, 19 percent had a high school diploma, 10 percent had studied beyond high school and 19 percent were qualified in a trade or profession. At the time of their child's birth, 55 percent of the young unmarried mothers were in school, 27 percent of the young married, six percent of the older unmarried and five percent of the older married mothers.

The different educational achievements are not merely a function of the percentage of teenagers in the sample, since 24 percent of the young married mothers had completed grade 12 prior to the birth of their first child as opposed to 11 percent of the young unmarried mothers. A similar pattern also exists for the older mothers, since only 34 percent of the unmarried mothers had completed high school, compared to 70 percent of the married mothers.

By 1989, educational levels had improved for all groups, but the considerably higher attainment levels of the married mothers, particularly the older married mothers, is still evident. Seventy-seven percent of the married mothers now have a high school diploma, compared to 39 percent of the unmarried mothers, and 62 percent versus 35 percent are qualified for a trade or profession. The older unmarried mothers, on the other hand, are unlikely to upgrade their education. Unmarried mothers who stay with their parents following the child's birth are more likely to return to school than those who move out of the parental home. In addition, women who are in school at the time they become pregnant are more likely to return to school than mothers who have already dropped out. Evidence suggests that it is easier for the younger mothers to continue their education, since they fit in more easily with the young people finishing high school or attending vocational programs.

Employment

Older married mothers (64 percent) were more likely to have been in the labour force than older unmarried mothers (53 percent) or young mothers (48 percent for both married and unmarried). Despite these different percentages the length of employment was similar, five years and seven months for married mothers and five years, two months for unmarried mothers.

The mothers experienced different rates of unemployment. Seventeen percent of the older married mothers had had involuntary unemployment, 36 percent of the young unmarried, 40 percent of the young married and 46 percent of the older unmarried mothers. Young mothers reported that their employment opportunities were restricted by their low level of education and their lack of appropriate work experience. Approximately 46 percent of the young mothers cited each of these factors as limiting their participation in paid employment.

Because of the sex-segregated labour force, it is not surprising that 68 percent of the mothers were employed in clerical, service, sales, medical and teaching occupations. The differing levels of educational attainment result in married mothers being more likely to hold professional jobs in teaching and nursing, whereas unmarried mothers were in less secure and less well-paid positions. Sixty percent of the young mothers, both married and unmarried, were employed in secondary-sector jobs (i.e., those characterized by low pay, limited fringe benefits and insecure career opportunities), compared to 46 percent of the older unmarried mothers and 24 percent of the older married group. The mothers' earnings reflect this. Among married mothers, 39 percent were earning in excess of $12.50 an hour; only seven percent of the unmarried mothers were in this category. However, 46 percent of this latter group earned less than $6.50 an hour, compared to 22 percent of the married mothers.

Income

Many of the mothers and their children lived in financial hardship. This is supported by the high percentage of mothers who received municipal social assistance or provincial family benefits sometime during the 10-year period. Sixty-five percent of the unmarried and 13 percent of the married mothers were in this position. Across the four groups, the percentages range from 10 percent of the older married mothers, to 43 percent of the young married, to 56 percent of the older unmarried and 69 percent of the young unmarried mothers. Despite this heavy reliance on social assistance, only three percent of the mothers received assistance for nine years or more.

What was more common was that mothers who had received social assistance had an intermittent reliance on such programs. Young married mothers received social assistance for the least amount of time, one year, six months; followed by older married mothers, two years, two months; young unmarried mothers, three years, two months; and older unmarried mothers, four years. On average married mothers received social assistance for two years, one month and unmarried mothers three years, five months.

Partly because of the reliance on social assistance and partly because of low levels of income from paid work, 32.8 percent of the mothers lived in poverty, according to levels established by Statistics Canada. This is twice the provincial poverty rate. Across the four groups, 54 percent of the older unmarried mothers lived in poverty, 52 percent of the young unmarried, 29 percent of the young married and 16 percent of the older married mothers. Thus, 53 percent of the unmarried and 18 percent of the married mothers lived in poverty.

Poverty is not confined to those who do not work in the paid labour force. Poverty is also clearly associated with the working poor, since 25 percent of the employed mothers still lived below the poverty line. At present, among the married mothers, husbands, on average, contributed 62 percent of the household income, compared to 37 percent of the unmarried mothers, more of whom are single parents. Being well off is plainly associated with being married, better educated and employed in the primary sector, i.e., holding a well-paid, secure job with the possibility of advancement.

In summary, results from the study document how the mothers' lives changed over the past 10 years and the complexity of factors which help explain their current circumstances. In virtually all areas explored in this study the older married mothers were better off than younger mothers and older unmarried mothers. If the older married mothers can be seen as setting the norms with respect to family circumstances and well-being of children, then mothers in the other groups often do not experience the same level of attainment and security and do not reach the same standards. Life for these mothers is more difficult.

Although the gap on some issues narrowed over the decade, young mothers and older unmarried mothers continued to be disadvantaged vis-a-vis the women who were 20 and over and married at the time their first child was born. However, a number of factors must be stressed. First, a large majority of the children are progressing well, irrespective of their mother's age and marital status at the time of their birth. This applies to the intellectual and social development of the children, their behaviour, their health and the care they receive from their mothers and other caregivers. Second, in looking at how the four groups of mothers fared in the past 10 years, group findings must not obscure the fact that some mothers in each group experienced considerable hardship. Similarly, in each group, some mothers had only positive experiences. While the results show that the different groups are more likely to have had one experience as opposed to another, the diversity in each of the groups must be acknowledged when social policy issues are considered.

Finally, it is apparent that the effects of age and marital status on the mothers' circumstances are often indirect; they influence, for instance, educational attainment, which in turn affects employment opportunities and financial security and hence housing, leisure activities — indeed, virtually all areas of their lives. While the older married mothers are obviously in the best circumstances, it is more difficult to predict for the other groups because there is variation among the groups on specific issues as to who is experiencing most difficulty. Nevertheless, evidence indicates that childbearing, as an unmarried mother, makes life, on average, considerably more difficult than if a woman is married and has a child later in life.

Although the young unmarried mothers made significant improvements in their circumstances in the 10 years, they started in a less-favoured position and have not yet caught up. Their disadvantaged position vis-a-vis the older married women is not, however, merely a function of age. The older unmarried mothers also experienced more difficult circumstances than their married counterparts and in some instances appear more disadvantaged than the young unmarried mothers. This older group has not previously been recognized as a distinct group with specific difficulties, and yet it is evident they encounter certain problems to a greater extent than other mothers. On some issues, therefore, marital status is an important factor, while on others age is more significant. On many issues, however, the differences among the mothers are insignificant, suggesting a similarity of experience regardless of the mother's original age and marital status when her first child was born.

Recommendations

If the needs of mothers and children identified by this study are to be more suitably addressed, a comprehensive approach focused on the circumstances in which families live is essential. In broad terms, improvements depend on policies and programs directed at three inter-related areas: economic development, employment programs and improved social support.

Economic Development

The question of the economic status of Nova Scotia, and indeed the country, is clearly beyond the scope of this report. Yet the large economic issues of the country do affect the lives of individuals and their families. While the debates on economic policies may, at times, seem far removed from individuals' everyday circumstances, these policies set the stage for people's economic well-being. It is within the parameters set by these policies that people seek employment and strive for financial self-sufficiency.

Regional development is certainly an issue which successive federal and provincial governments have addressed, since the economic status of the province affects the number and types of jobs available. Despite these efforts, however, Nova Scotia continues to experience job shortages and to depend on marginal forms of employment. The shortage of jobs is reflected in the province's relatively high rates of unemployment: in January, 1989, the unemployment rate in Nova Scotia was 9.2 percent; Halifax had a rate of 7.8 percent while Cape Breton's rate was 19.2 percent.

Nova Scotia also has a relatively limited manufacturing sector resulting in a heavy reliance on the primary and service sectors.[1] Particularly in the small communities, employment opportunities are limited. Work is frequently seasonal, wages quite low and economic benefits, such as pensions and additional health care programs, restricted in their availability. Women, in particular, face difficulties finding employment in small communities given the continued sex-segregated labour market and the generally limited employment opportunities.

Where many women have found employment is in the service sector. This sector has been expanding more rapidly than others in recent years and such major economic growth is expected to continue.[2] While positions in this sector can be secure and well-paid, much of the recent growth has been in low-wage and part-time jobs. Part-time positions typically do not provide workers sufficient income for financial security nor entitle them to many economic benefits. Compared to men, women hold a disproportionate number of low-paid and part-time positions.[3]

All these factors mean that despite everyone's best efforts, employment cannot always be the means of maintaining financial security. The economic realities of the province are such that other forms of assistance will be required. Economic and employment policies, however, continue to be of considerable importance. Efforts to enhance the economic status of the province obviously will and must continue.

Employment Programs

While the economic policies of the country and the region will help determine the number and types of jobs available, who holds the jobs and the conditions attached to them determine the financial circumstances of women and their families. The sex-segregated nature of the Canadian labour market is an enduring feature that results in women being disproportionately represented in the lower-paid positions — which offer the least financial security and the least opportunity for advancement.[4]

As the results of this study indicated, women who were not married when their first child was born tended to exhibit less desirable career patterns than did women who were married. The unmarried women were more likely to have occupations that clearly placed them in the secondary labour market. In addition, although the unmarried and married mothers who were in paid employment exhibited equal time commitments to the labour force, the married mothers were more likely to hold jobs in the primary sector that provided relatively higher pay and increased opportunities for advancement.

Although these issues have been recognized for some time, changes in the distribution of positions have been very slow and have not been particularly dramatic. Consequently, the majority of women continue to earn lower salaries than men and to work in specific sectors of employment. Efforts to change these circumstances have been directed primarily in two ways. One is to focus on desegregating the job market so that women obtain positions traditionally held by men which are typically higher paying. These efforts are supported at a policy level through employment equity programs. Secondly, positions are being evaluated through pay equity schemes to establish more objectively appropriate pay rates by considering the skill, responsibility, complexity and working conditions attached to positions. It is anticipated that this re-evaluation will result in many positions held by women being financially upgraded.

A third approach that has been studied but that has resulted in little change concerns the pay and benefits attached to part-time positions. In 1983 the Federal Department of Labour published a report of the Commission of Inquiry into Part-Time Work.[5] This report reviews the development of part-time employment in Canada and addresses ways in which the employment position of part-time workers can be improved. Now as then, however, part-time work continues to be characterized by low pay, a lack of pensions and fringe benefits, and few opportunities for training and promotion.

The recommendations contained in the Report, with respect to such issues as the place of part-time work in the labour market, the provisions of pensions and fringe benefits, and the protection of part-time workers, are still timely and provide a comprehensive approach to addressing the needs of those who work in this segment of the labour market. Given the continued growth of part-time positions, it is important that conditions attached to such jobs be improved.

Although desegregation of the labour market has been an issue of public debate for the past 20 years, early efforts focused on training and support systems for women. The assumption was that once women were properly trained and educated, they would be hired into appropriate positions. This approach overlooked the subtle and inherent biases of the employing organizations, which often led to continued preference for male colleagues in "male jobs" and for women in traditional support positions. Experience showed that the desegregation of the labour market would be an extremely slow process if it depended on employer initiative.

In an effort to counteract this problem, employment equity legislation is being introduced or considered by a number of jurisdictions across the country.[6] Such legislation allows for the preferential hiring of designated groups, one group being women, in jobs where they are under-represented. Although such legislation is the subject of much debate, both in terms of the overall approach to changing employment patterns and in terms of the specific content of the legislation, it does indicate the seriousness of the problem. Further, it indicates the interest of governments in promoting more equitable employment opportunities and that this is an issue that will continue to receive attention for some time to come. Nova Scotia does not have employment equity legislation at this time, but the legislation available elsewhere could provide the basis for a provincial approach to the issue.

Pay equity legislation was introduced in Nova Scotia in 1988. The purpose of the Pay Equity Legislation is to increase the pay of employees in classes that are predominantly female, where it is determined by reason of sex discrimination that these employees are paid below acceptable standards. Although the intent was to eventually include the private sector in the legislation, only the public sector was included in the Pay Equity Act. Therefore, further action is needed by the Legislative Assembly to include the private sector. In addition, experience with the current legislation and with legislation in other provinces has indicated a number of areas where the Act needs amendment. In particular, there is a need to address the issue of women-only work sites where there are no men, or too few men to determine whether women are receiving fair compensation.

Given the importance of improving women's position in the labour force, **it is recommended that,**

The Government of Nova Scotia:

(1) Review its pay equity legislation with the intent of including all sectors of the economy and of ensuring that all positions held by women can be evaluated under the legislation;

(2) Introduce employment equity legislation that pertains to all sectors; and

(3) Implement the recommendations of the 1983 federal Commission of Inquiry into Part-time Work, which are under the purview of the Province.

Structural changes to the labour market will not completely resolve the employment and low-income problems faced by women, however. The employment limitations women encounter because of relatively low levels of education is a strong theme throughout this study. In looking at education, therefore, it is necessary to address a number of issues: the dropout rate of girls in high school; the choice of high school and post-secondary programs; employment and career expectations; and opportunities for educational upgrading and retraining.

Recent studies continue to document the expectations young girls have about the economic security they will gain through marriage.[7] Many regard marriage as the most important factor in their future and are considerably less concerned about their career and job prospects than about marriage. Consequently, many do not retain an interest in school nor plan their education to enhance their future options. Girls often continue to opt for the traditionally female occupations for which the pay and security have yet to be improved. In post-secondary education, there is again an uneven distribution of women across available programs. While the enrolment of women has increased sharply in such areas as commerce, law and medicine, women continue to enrol predominantly in the humanities and social sciences. There is a need to reinforce the message to girls and young women that they should plan for jobs and careers that will lead to their own financial self-sufficiency and not to anticipate that marriage will solve this problem.

Despite improved efforts in the school system, it will undoubtedly be the case that some young women will leave school with limited educational attainment. Access to upgrading programs, therefore, is essential as is access to training and retraining courses. Adult women report difficulty in returning to a regular school oriented to young people. This suggests that successful programs for adults must be specifically designed for them.

There have been recent initiatives to expand training opportunities for women receiving social assistance through the Agreement to Enhance the Employability of Social Assistance Recipients.[8] It is important that such initiatives provide opportunities to upgrade basic education levels, as well as develop specific skills. Skills training should be in occupations that are relatively well-paid and where there will be continuing opportunities for employment and prospects for advancement. For women to take advantage of training opportunities it will often be necessary to provide assistance with childcare and transportation.

Adult-education opportunities are especially important for mothers with limited educational attainment. Programs must be available throughout the province. At the same time, there is a further need for job training that provides ongoing employment and employment that receives fair compensation. **It is therefore recommended that:**

(1) The Government of Nova Scotia ensure that appropriate educational opportunities for adults,

particularly women, are available throughout the province, and

(2) The Government of Nova Scotia and the Government of Canada continue to expand employment training opportunities for women, such expansion to include women in all regions of the Province and a broader range of jobs.

To support these initiatives it is essential that sufficient subsidized daycare be available. The quality of life of many mothers who currently cope with childcare through a series of arrangements which are not always very reliable or secure, would be improved substantially if quality daycare was more readily available. It is also apparent that the uneven distribution of affordable daycare hampers the capacity of mothers to enter the labour market and is a major deterrent in entering educational or training programs. Since the collapse of the Federal Government's initiative on daycare, little attention has been given to earlier commitments to continue the expansion of affordable, quality daycare. The need for such a program, however, has not diminished and daycare must continue to be on the political agenda. **Therefore, it is recommended that**:

The Government of Nova Scotia renew its commitment to providing quality, affordable daycare throughout the province.

As many of the changes suggested above will take time to implement, it is important that every effort be made in the meantime to assist mothers who are seeking employment and financial independence. This means that allowances for daycare, and the continuation of special-need benefits are essential for mothers in educational programs and as they move into the labour market. **Therefore, it is recommended that**:

Benefits to cover costs associated with training and employment, e.g., transportation, daycare, be provided to mothers as they enter the labour force either through social assistance or training programs.

Social Programs

Economic development, employment equity programs and expanded training will not address the immediate needs of mothers and children living in financial and social difficulties. Nor is it likely that such approaches will, in the long run, result in broadly-defined programs of assistance becoming completely redundant. Although a healthy economy and improved conditions of employment would assist many families, it will always be the case that some people will be outside the economic mainstream. Such people, for various reasons, cannot obtain employment or have limited incomes from earnings and will require assistance to maintain an acceptable standard of living.

There are a number of programs that provide financial assistance to Canadian families. Family Allowance, the Child Tax Credit and the Child Care Expense Deduction are the major financial programs specifically designed to assist families with young children. The Family Allowance rate for 1978 was $25.68 a month or $308.16 a year, with the 1989 equivalents being $32.74 and $392.88. Family Allowance is available to all families with dependent children while the Child Tax Credit is based on financial need as determined by family income, although both programs are designed to help with the cost of raising children. The Child Tax Credit was initiated in 1979 with a maximum rate of $218 per child for families with a total income of less than $19,620. For 1988, the equivalent figures were $559 per child for families with a total income less than $24,090. Perhaps the major drawback to the Child Tax Credit is that it is paid after all expenses have been incurred and consequently does not assist in the on-going, weekly expenses of the household.

For the Child Care Expense Deduction, most families would only be able to deduct a maximum of $1,000 from employment income for each child up to four children to assist in covering daycare costs in 1978. This Deduction has now been increased to $4,000 for each child aged six or under. While such deductions are important to many families, such an approach is of little assistance to those on low incomes who simply cannot afford to pay daycare fees. Subsidized daycare is designated to assist those families on social assistance or with very low incomes, but such daycare places are limited in number and often not available in all communities. There were a total of 2,806 subsidized places in Nova Scotia in 1987. Even though the benefits of these three programs increased over the 10-year study period, such assistance still covers only a small part of the total expenses associated with raising children.

Unemployment Insurance benefits are of importance in a region such as Nova Scotia where unemployment rates are often high. Such benefits are only available, however, to employees who have made contributions for the required period of time, which, in 1989 was on average 14 weeks depending on the region within Nova Scotia. Benefits are calculated at 60 percent of insured earnings but subject to a maximum of $605 a week in 1989. They are available for up to 50 weeks under certain conditions. However, Unemployment Insurance benefits depend on being in the labour force and meeting the minimum number of weeks employment — something that can be difficult when work is seasonal.

For families such as the ones in this study, a lack of income from employment or Unemployment Insurance results in assistance through municipal social assistance programs or the provincial Family Benefits program. This two-tiered program of social assistance was designed to address the short-term needs of families municipally and the longer-term needs provincially. Although it was assumed that community-based programs would be better able to address the specific needs of families in their areas, the result has been 29 different policies for the 66 different municipal units across the province — differences that are difficult to justify. While the Family Benefits program has a single set of policies, it requires the client to fit defined categories, for example, single parents with dependent children or be disabled.

Perhaps most central to any discussion on financial assistance is the overwhelming conclusion that current programs result in an inadequate level of support for many families. The income available to the families through social assistance programs is simply too low to allow an acceptable standard of living. Families are inadequately housed, cannot purchase sufficient food, and put their health at risk because they do not have the money to purchase necessities.

In 1987-88, the social assistance available through the municipalities and through provincial Family Benefits varied from $677 a month for a four-person family (mother, father and two children) to $965 a month (see Table 13.1). The maximum annual income for such a family on Family Benefits is $11,580 — well below the low income cutoff range of $17,303 - $23,521 (actual figure depending on community size) established by Statistics Canada for 1988.[9] Single-parent families in which there is one adult and one child could derive a maximum income of $8,232 from social assistance in the same year. While there is often concern that "welfare" is an attractive alternative to people who simply do not wish to work, the level of payments is so low that it jeopardizes the well-being of adults and children who have no alternative but to depend on social assistance.

Equally problematic are the circumstances of the working poor for whom assistance over and above the wages they earn is virtually non-existent. Increasingly, families are finding that it takes

TABLE 13.1

Average Rates for Municipal Social Assistance Recipients by Region and for Provincial Family Benefits Recipients
May 1, 1988

Region	Food, Clothing, Personal Allowance	Shelter	Total
	One Adult with One Child		
Cape Breton	$ 219	$ 467	$ 686
Valley	182	374	556
South Shore	223	354	577
Halifax	233	422	655
North Shore	188	366	554
Central	188	353	541
Western	192	375	567
Family Benefits	237	448	658
	Two Adults with Two Children		
Cape Breton	$ 349	$ 467	$ 816
Valley	322	374	696
South Shore	421	369	790
Halifax	467	437	904
North Shore	311	366	677
Central	334	362	696
Western	364	375	739
Family Benefits	476	489	965

two wage earners to provide for their needs. Where this does not occur because, for example, of unemployment or being a single parent, the family is often in difficulty financially. The families of single female parents are often particularly disadvantaged because many of these mothers are in low-paying jobs. Nova Scotia's current minimum wage is $4.50 an hour. Working a full 40-hours a week for a year results in an annual income of $9,360 — again, well below the low income cutoff range established for 1988 by Statistics Canada of $11,178 - $15,258 for a single parent with one child, and even further below the needs of a family of four.

Although families are eligible for social assistance on the basis of financial need, allowances for basic needs, particularly municipal assistance allowances, are often set so low that many families with low earnings do not qualify. To better address the financial needs of families, **it is recommended that**:

> **The Government of Nova Scotia implement a program to provide financial benefits for children.**

This program, available to all families with dependent children, would provide more realistic assistance with the costs of raising children to help ensure that children do not suffer the consequences of poverty. The Ontario Social Assistance Review Committee, in its recent report on social assistance programs, recommends just such an approach.[10] The introduction of this benefit calls for joint action by provincial and federal governments, since it would involve several existing programs, including Family Allowance, Child Tax Credit, and social assistance benefits for children. This approach, which recommends that benefits be subject to an income test and to a threshold income above which benefits would be reduced, is worthy of consideration. The Ontario Review Committee is recommending a maximum of $3,000 per child for families with the lowest incomes. This is a substantial increase in the money available to households on very limited means and results in a major redistribution of benefits.

Although a Children's Benefit Program will go a long way to help children in poverty, it cannot replace social assistance. Yet the provincial social assistance programs have been the subject of much criticism in recent years. In addition to being deemed inadequate, provincial and municipal social assistance programs are also considered to be inequitable because people in objectively similar circumstances receive different levels of benefits, both monetarily and in access to services such as extended medical benefits. Not surprisingly, families accessing social assistance find it confusing since different regulations apply between municipalities, and between municipalities and the province. Regulations are often unclear or imprecise, allowing for considerable latitude in interpretation by case workers. Differing interpretations can lead to unfairness to clients. The lack of clear guidelines also means that recipients have little chance of gaining a full understanding of the regulations and hence their entitlement to particular benefits.

Because of the two-tiered assistance system there is duplication of effort: applications from one system cannot automatically be transferred to another. Typically a transfer of a client from one jurisdiction to another requires the client to undergo an entirely new assessment and application process, including transfer to a different case worker. Further, there is no provision in the Family Benefits program to provide for special needs, such as drug costs (except in the case of the disabled). Family Benefits recipients must apply to the municipality if they have special needs, but may be unable to establish entitlement because of lower municipal rates.

If little assistance is given to those in the labour force, equally little assistance is given to those seeking to find paid work and leave the social assistance rolls. The disincentives to become self-reliant are often built into the system. This applies not only to monetary payments, but also to other benefits, e.g., a pharmacare card. To compensate for this loss, a person has to earn a considerable income. In addition, the costs associated with being employed, e.g., travel and daycare, place further burdens on those with limited incomes. While the Family Benefits program and some municipal programs provide financial incentives for recipients who obtain employment by exempting a portion of earnings when determining benefit levels, these incentives do not always cover the additional costs. Furthermore, many municipal programs do not provide any financial incentives. In many instances, therefore, the system actually discourages people from seeking employment.

Because social assistance systems have developed in a piecemeal fashion, they provide inadequate assistance, have inequitable and confusing rules and work against the fundamental principles of ensuring that families have sufficient income and are helped and encouraged to become self-sufficient. An improved social assistance program can be achieved through three major initiatives:

(1) providing consistency of rates, programs and policies across the Province;

(2) awarding benefits on the basis of need and not according to pre-determined categories; and

(3) increasing allowances.

The province must take the lead in developing a program that will deal fairly with those most in need. Because of the magnitude of all the changes that will result from the implementation of a new system of social assistance, it will be necessary to develop a comprehensive and coherent implementation plan. **Therefore, it is recommended that**:

The Government of Nova Scotia undertake a major review of the social assistance system in order to improve the system by providing for consistency of rates, programs and policies across the province, equitable treatment of

all individuals and families regardless of their geographical location, and increased benefits to meet the needs of recipients and their families.

Adequate housing continues to be a major concern for many families in this study. Adequacy refers not only to the location and type of housing but also to the cost. Mothers and children would be better served if programs for affordable housing were not only continued but expanded. The experience of many municipalities and provinces across the country with public housing now enables the design and management of low-income housing that meets the needs of residents. In addition, land assembly schemes, assistance with mortgages and low-cost improvement loans are significant means to assist families with housing. **It is recommended that**:

The Government of Nova Scotia and the municipalities extend their programs for affordable housing.

The circumstances of many families would be significantly improved if programs addressing certain special needs were expanded. The lack of a prescription drug program is a major disincentive for families to move off social assistance and results in low-income families being unable to have access to a full range of appropriate health care. Ideally, this program should be available to everyone. **Therefore, it is recommended that**:

The Pharmacare Program coverage be uniformly extended to individuals and families on social assistance or with low incomes.

In addition, the needs of mothers whose children are chronically ill require particular attention. These needs are certainly related to access to adequate health care programs, but are also related to the need for personal support for the mothers who look after sick children. While volunteer groups associated with particular illnesses do exist, it is apparent that the overwhelming burden of taking care of a sick child falls to the mother. The volunteer groups may provide greater assistance with understanding the nature of an illness or through helping parents if a child is hospitalized but have a limited capacity to assist on a daily or weekly basis by providing relief for mothers. **It is recommended that**:

The Government of Nova Scotia, in conjunction with volunteer organizations, explore ways to extend the assistance available to families with chronically-ill children.

Evidence from the study also suggests that mothers would benefit from discussions about childrearing in general. This need, which has been identified for mothers with new-born and young children, appears to be an ongoing one. Mothers are faced with different problems as their children grow older but often do not have appropriate people to ask for help and guidance. This is particularly the case for mothers who do not have other family members to rely on, most noticeably the older unmarried mothers. To counteract this problem, **it is recommended that**:

> **The Government of Nova Scotia, in conjunction with volunteer organizations and other interested agencies, establish parent resource centres such that mothers and fathers can have access to advice on childcare, courses and workshops and to opportunities for informal exchanges on raising children.**

It is not anticipated that such resource centres would necessitate an entirely new initiative, but rather that they could be an expansion of services currently offered through health clinics, church organizations and other family service agencies.

To adequately address the particular needs of children at risk and their parents, it is also necessary to update the knowledge and strategies of the professionals who plan and implement courses and programs, and who counsel families. **Therefore, it is recommended that**:

> **The Government of Nova Scotia, in association with educational and other interested organizations, initiate a program for professionals in the education, social service and health fields to create an awareness of the needs and strengths of mothers and children at risk, and of the strategies for intervention, and to foster skill enhancement for delivering programs and services to these families.**

Education

Although education can be seen as a set of programs within the broadly-defined area of social programs, its importance is such that it is singled out for special attention in this section. It must be remembered that the success of educational programs is closely related to the circumstances of the family. Children and young people will find it difficult to succeed in school if they come from families that have poor, over-crowded housing, are not well fed or have inadequate health care. These conditions make it very difficult for children to concentrate on school activities or to receive the encouragement and out-of-school opportunities that will enhance their school learning. At the same time, it is possible that without adequate educational attainment, young women may perpetuate the disadvantaged family circumstances characteristic of some families in this study.

With respect to children and young adults, the experiences of the mothers and their children documented in this study indicate a need for special programming. In particular, every effort must be made to retain young people in the educational setting. Young people typically drop out of school prior to completing high school because they see it as unimportant, uninteresting and sometimes too difficult. Children whose mothers have achieved 11 years or less in school are particularly at risk with respect to language and reading skills.

Special programs can be designed to assist children at risk. Ideally, these should involve the parents as well as educational organizations. Such collaboration would not only reinforce the inter-relationships among the student, the family and the school, but also provide an opportunity for parents to learn how to assist their child in school subjects and with appropriate behaviour. As some parents may find such an undertaking difficult, given their own educational attainment, a second part of the program should work in conjunction with current upgrading and job-training programs to enhance the General Education Development (GED) experiences, develop generic thinking and problem-solving skills, and foster career development for the parents.

To develop this initiative, special summer programs for children could be organized in which language enrichment would be the focus but which would involve other areas of the child's life, such as behaviour, nutrition and family life issues. The objective would be an enhanced experience aimed at reasoning skills and language. The approach envisioned in this program calls for the active consultation and involvement of the parents, not only because such an approach would enhance the positive results for children, but also because it gives the parents an opportunity to become their own advocates and mentors for others in their community. **It is therefore recommended that**:

> **The Government of Nova Scotia develop special supplementary programs for children at risk to be offered in the school system that:**
>
> **(1) focus on language development, reading, behaviour and family life issues,**

(2) involve parents in the child's learning experience,

(3) provide opportunities for parents to upgrade their basic skills, and

(4) are available during the school year and the summer months.

A further issue that arises from this study is the need to address the substantive long-term development of children and young people. Many of the young women who became mothers at an early age have progressed well and established a satisfactory family life. As a group, however, the young unmarried mothers have not caught up to the older married mothers with respect to a number of indicators of financial and family stability i.e., household income, home ownership, employment opportunities and satisfaction with life.

Although the circumstances of the unmarried mothers can be substantially improved through the provision of better financial and social programs, it is nevertheless important to prevent early, unwanted pregnancies. Schools have an important role in educating children and young people about sexuality and responsible sexual relations. While courses dealing with personal development currently exist in schools e.g., the health and personal living skills program, **it is recommended that**:

> **The health and personal living skills courses include units on family life, parenting, lifestyle, career development, social relations and mental health; be developmentally structured to serve from pre-school to grade 12 and be compulsory.**

The issue addressed in this recommendation is the development not only of knowledge, but also the effective use of that knowledge. Individuals may know a number of facts about various issues, but not know how to apply that knowledge in their own situation. Course work over a number of years that adopts an active involvement process should facilitate both improved problem-solving and knowledge.

If such courses are to be taught in appropriate ways, it will be necessary to enhance teachers' knowledge about these issues and for them to develop the necessary skills for teaching in such a program, as well as to maintain an attitude and philosophy compatible with the program.

Therefore, it is recommended that:

> **Preparation for teaching comprehensive health and personal-living skills courses be included in teacher preparation programs and that in-service programs in this area also be made available to teachers.**

The initiatives described in this section on education require bold and concerted action to address the needs of children most at risk of dropping out of school. **Therefore, it is recommended that**:

> **The programs described above be implemented on a pilot basis in different regions of the province with the long-term goal of making them available in all school districts.**

The recommendations included in the report are designed to address the broad range of issues encountered by families with young children. In studying the families over a 10-year period the inter-relationships among financial security, education and social and physical well-being are striking. It is not possible, therefore, to simply address one of these issues and to expect that the circumstances of the families will automatically improve in other areas as well. Rather, comprehensive, family-oriented assistance that will enhance the capacity of families to live independent and fulfilling lives needs to be developed and delivered. While many families are already able to do this, others clearly need assistance. That assistance must be readily available if we are to promote the development of children and young people in such a way as to maximize their opportunities.

Footnotes

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8. Request for Proposals: Evaluation of Nova Scotia Provincial SARS [Social Assistance Recipients] Project. Nova Scotia Department of Community Services. November 1989, p. 1.

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APPENDIX A

TABLES AND FIGURES OF EXTENDED LENGTH

TABLE A1

Number of Births and Therapeutic Abortions in Canada to Single Women (never-married), by Age Category

BIRTHS	**AGE**								
	Under 15 Years	**15-19 Years**	**20-24 Years**	**25-29 Years**	**30-34 Years**	**35-39 Years**	**40-44 Years**	**Over 44 Years**	**Total Years**
1974	217	9,653	5,378	1,707	544	175	43	3	17,720
1975	300	12,497	6,872	2,235	687	207	47	1	22,846
1976	291	12,869	7,371	2,331	722	240	38	4	23,866
1977	296	16,800	11,645	4,008	1,365	367	65	4	34,550
1978	300	16,806	12,610	4,336	1,536	426	76	7	36,105
1979	297	16,671	14,059	5,259	1,812	442	71	6	38,617
1980	260	17,188	15,770	6,035	2,119	478	81	3	41,934
1981	262	17,217	17,699	7,124	2,557	613	94	2	45,568
1982	262	17,880	20,038	8,425	3,027	801	92	1	50,526
1983	215	16,516	21,531	9,933	3,639	936	117	3	52,890
1984	244	16,065	22,822	11,167	4,207	1,108	147	4	55,764
1985	223	15,698	24,199	12,960	4,962	1,352	151	3	59,548
1986	205	15,937	25,175	14,240	5,644	1,561	174	2	62,938
1987	-	-	-	-	-	-	-	-	-
THERAPEUTIC ABORTIONS									
1974	504	11,798	8,062	2,598	734	218	58	9	23,981
1975	591	13,948	9,512	3,250	975	266	78	7	28,627
1976	659	15,061	10,690	3,727	1,054	313	79	7	31,590
1977	663	16,055	11,850	4,036	1,322	381	70	6	34,383
1978	592	17,377	13,378	4,550	1,493	436	80	9	37,915
1979	641	18,177	14,934	5,213	1,789	483	70	4	41,311
1980	554	18,041	15,763	5,684	1,848	533	107	12	42,542
1981	544	17,041	15,992	5,955	2,129	649	124	15	42,449
1982	513	16,387	16,707	6,402	2,148	699	124	6	42,986
1983	-	-	-	-	-	-	-	-	40,560
1984	449	13,662	16,562	6,904	2,565	863	154	18	41,177
1985	485	12,834	16,245	6,948	2,738	975	201	24	40,450
1986	378	13,097	16,594	7,611	3,137	1,097	195	7	42,116
1987	368	12,656	15,905	7,852	3,286	1,169	220	18	41,474

Source: Statistics Canada, *Therapeutic Abortions*, Catalogue 82-211, Annual. Statistic Canada, *Vital Statistics, Births and Deaths*, Catalogue 84-204, Annual

TABLE A2

Number of Live Births, Total Fertility Rate, Canada, for Selected Years

Year	Number of Live Births	Total Fertility Rate per 1000 Women[1]
1921	264,879	3,536
1931	247,205	3,200
1941	263,993	2,832
1951	381,092	3,503
1959	479,275	3,935
1961	475,700	3,840
1971	362,187	2,187
1976	359,987	1,825
1977	361,400	1,806
1978	358,852	1,757
1979	366,064	1,764
1980	370,709	1,746
1981	371,346	1,704
1982	373,082	1,694
1983	373,689	1,680
1984	377,031	1,681
1985	375,727	1,669
1986	372,913	1,672

[1] Excludes Newfoundland

Source: Statistics Canada, *Vital Statistics, Births and Deaths.* Catalogue 84-204 Annual.

TABLE A3

Marriages, Marriage Rates and Average Age at First Marriage, Canada, Selected Years

Year	Number of Marriages	Marriage Rates[1]		Average Age of Brides	Average Age of Bridegrooms
		Women	Men		
1971	191,324	69.5	71.8	22.7	24.9
1976	193,343	61.0	65.4	22.7	25.0
1977	187,344	57.4	61.8	22.8	25.1
1978	185,523	55.3	59.7	23.0	25.2
1979	187,811	54.5	59.2	23.1	25.4
1980	191,069	54.0	58.9	23.3	25.5
1981	190,082	52.6	57.6	23.5	25.7
1982	188,360	50.7	55.6	23.7	25.9
1983	184,675	—[2]	—	24.0	26.2
1984	185,597	—	—	24.3	26.5
1985	184,096	—	—	24.6	26.7

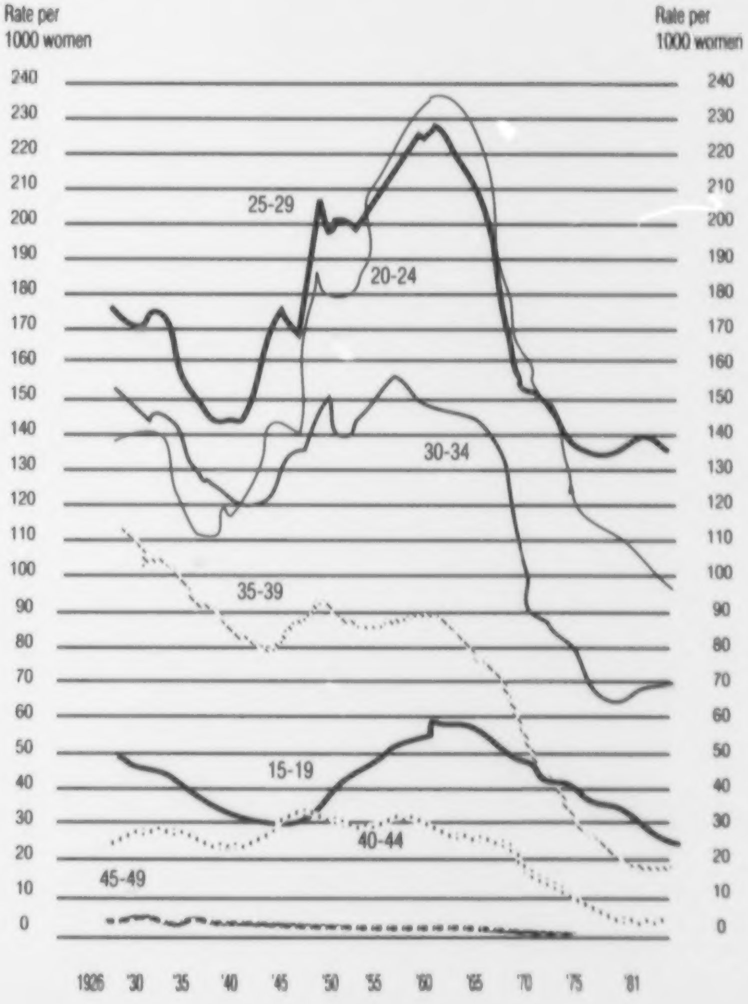
[1] Marriages per 1,000 single, widowed and divorced population

[2] Data not available

Source: Statistics Canada: *Women in Canada* p. 10 and *Vital Statistics, Marriages and Divorces*. Catalogue 84-205, Annual

FIGURE A1

Age Specific Fertility Rate per 1,000 Women, Canada, 1926-81



Source: Statistics Canada: Romanuic 1984 p. 28.

TABLE A4

Births to Single Women[1] as a Percentage of Total Live Births, Canada, The Provinces and Territories, Selected Years

Year	Canada	Nfld	PEI	NS	NB	Que	Ont	Man	Sask	Alta	BC	Yukon	NWT
1921	2.0	—	2.3	3.0	1.7	—	2.1	2.3	1.1	1.8	1.2	—	—
1931	3.5	2.7	3.6	5.4	3.4	2.9	4.0	3.6	3.0	3.7	2.8	—	—
1941	4.0	4.0	4.7	7.0	3.5	3.0	4.7	3.5	3.5	4.2	4.6	—	—
1951	3.8	3.6	5.2	6.7	4.0	3.0	3.3	3.9	4.5	4.7	5.8	12.0	7.2
1961	4.5	4.3	4.8	6.9	4.4	3.6	3.5	6.3	5.9	6.2	6.9	16.8	12.6
1971	9.0	9.6	8.1	11.7	9.7	7.9	6.5	13.0	14.1	11.9	12.2	24.7	21.7
1976	10.5[2]	—	10.5	12.5	12.3	—	8.4	13.8	14.9	11.2	11.5	23.7	30.8
1977	11.3	—	12.0	14.7	12.8	11.6	8.7	15.1	15.7	12.0	12.2	25.9	34.8
1978	11.7	—	11.8	15.2	13.8	11.7	9.2	15.7	16.7	12.6	12.4	26.0	37.6
1979	12.2	—	12.7	15.7	14.0	12.6	9.4	15.8	16.8	13.1	13.2	27.8	37.8
1980	13.2	—	13.0	16.1	16.0	14.2	9.9	16.7	17.9	14.1	14.2	26.5	41.3
1981	14.2	—	15.0	17.0	16.6	15.6	10.4	17.9	19.0	14.8	15.4	28.5	42.2
1982	15.5	—	14.6	17.8	16.4	18.1	11.4	18.6	19.2	16.2	15.7	34.7	43.5
1983	14.5	—	12.9	15.9	17.4	18.5	10.3	18.2	19.0	13.6	14.2	26.7	45.5
1984	15.1	—	15.7	16.7	17.9	20.4	10.7	17.9	19.7	13.6	14.2	25.2	46.0
1985	16.2	—	15.0	16.5	18.8	22.6	11.3	18.4	20.6	14.9	15.5	30.6	46.3
1986	17.3	—	15.9	17.6	19.5	25.3	11.8	18.6	21.7	18.6	16.0	29.6	48.9

[1] Births from 1921-1971 refer to those in which the parents reported themselves as not having been married to each other at the time of birth or registration and, in the case of Ontario, since 1949, those in which the marital status of the mother was reported as single.
From 1976 on births occured to single, widowed and divorced women, including not stated.

[2] Quebec not included for 1976.

Source: Statistics Canada: *Vital Statistics, Births and Deaths*. Catalogue 84-204, Romaniuc 1984 p. 144.

TABLE A5

Births to Unmarried Women, Canada, Selected Years[1]

Year	Number of Births To Unmarried Women		Fertility Rate per 1000 Unmarried Women In Age Groups[2]	
	All Ages	15-19 Ages	15-44 Ages	15-19 Ages
1951	13,931	4,548	13.46	9.67
1961	19,581	7,731	17.48	12.42
1971	31,177	14,074	19.46	15.05
1976[3]	30,234	15,658	16.67	15.24
1977	34,592	17,032	18.53	16.42
1978	36,065	17,003	18.80	16.24
1979	38,572	16,858	19.66	16.05
1980	41,813	17,348	20.85	16.55
1981	45,501	17,354	22.41	16.38
1982	50,608	17,880	23.89	17.31
1983	52,929	16,516	—	—
1984	55,794	16,065	—	—
1985	59,604	15,698	—	—
1986	62,976	15,937	—	—

[1] Calculations of the fertility rate for Canada exclude Newfoundland. The not-stated births have been pro-rated. Since no data were available for women 15-44 in the Yukon and NWT, an estimate of their fertility rate was obtained using the data for total births.

[2] From 1976 on, fertility rates have been calculated for births to single women only.

[3] Owing to the large number of not-stated births occuring in Quebec data for 1976, the fertility rate for Canada does not include Quebec.

Source: *Statistics Canada, Vital Statistics, Births, Deaths*, Catalogue 84–204, Romaniuc 1984 p. 36;

TABLE A6

Divorces and Divorce Rate,[1] Canada and Nova Scotia, Selected Years

	Canada		Nova Scotia	
Year	No. of Divorces	Rate	No. of Divorces	Rate
1951	5,270	—	187	—
1961	6,563	—	245	—
1971	29,685	607.2	721	418.8
1976	54,207	985.6	1,753	920.8
1977	55,370	988.9	1,802	928.4
1978	57,155	1,004.0	1,960	1,014.5
1979	59,474	1,028.7	2,227	1,168.5
1980	62,019	1,053.7	2,314	1,182.4
1981	67,671	1,129.2	2,285	1,132.7
1982	70,436	1,164.4	2,281	1,124.2
1983	68,567	1,125.2	2,340	1,145.4
1984	65,172	1,061.9	2,264	1,099.6
1985	61,980	1,003.5	2,337	1,122.5

[1] Divorce Rate: Per 100,000 married women 15 years and over.

Source: Statistics Canada: *Vital Statistics, Marriages & Divorices*, Catalogue No. 84-205

APPENDIX B

DISCUSSION OF STATISTICAL ANALYSIS

STATISTICAL ANALYSES

This section provides a brief description of the various procedures and the conditions under which they were used. Throughout the report, reference will be made to a number of bivariate, contingency and multi-variate analyses.

Bivariate measures summarize the relative association between two variables, for example, the marital status of the respondent when her first child was born and her receipt of a high school diploma (see Table 3.1).

TABLE B 1

High School Completion by Mother's Original Marital Status

High School Completion	married	unmarried	n
did not complete high school	36%	81%	(396)
completed high school	64	19	(273)
	n = (323)	(346)	(669)

Phi = .46.
Significance of Chi-square < .001

Table B.1 demonstrates that a higher percentage of the married respondents (64 percent) than the unmarried respondents (19 percent) had completed high school before their first child was born, and a higher percentage of the unmarried respondents (81 percent) than the married respondents (36 percent) had not completed high school. The two measures reported at the bottom of the Table provide information about the strength and level of significance of the association between marital status and high school completion.

Phi is a measure of association that summarizes the degree of difference between the reported findings and what would be expected if no relationship existed between the two variables. Table B.2 illustrates how the data would look if there was no association between marital status and high school completion.

The percentage of respondents not completing high school is exactly the same for both the married and unmarried groups (59 percent). Under this condition, Phi would equal 0, meaning that

TABLE B.2

High School Completion by Mother's Original Marital Status — (No Association)

High School Completion	married	unmarried	n
did not complete high school	59%	59%	(396)
completed high school	41	41	(273)
	n = (323)	(346)	(669)

Phi = 0
Significance of Chi-square = NS

unmarried mothers were just as likely as married mothers to have completed high school before their first child was born. At the other end of the spectrum — perfect association — all of the respondents in one group would have completed high school, while all of the respondents in the other group would not have completed high school. Table B.3 illustrates such a perfect association, where all of the unmarried mothers had not completed high school and all of the married respondents had completed high school. Under this condition, Phi would equal 1. Phi can also range between these two extremes, the higher the reported value the stronger the association between the two variables.[1]

TABLE B.3

High School Completion by Mother's Original Marital Status — (Perfect Association)

High School Completion	married	unmarried	n
did not complete high school	0%	100%	(396)
completed high school	100	0	(273)
	n = (323)	(346)	(669)

Phi = 1
Significance of Chi-square < .0001

Phi is only appropriate for 2 x 2 tables where both variables are dichotomous; in this case, married and unmarried, not completed high school and completed high school. For tables where either of the variables have more than two categories, another measure of association called Cramer's V is used. Cramer's V provides essentially the same type of information as Phi and, like Phi, can range from 0, meaning no association, to 1, meaning perfect association.[2]

The significance of Chi square provides different, but equally important, information. In most cases, survey research is based on a sample rather than an enumeration of all applicable persons. Because the findings represent only a small proportion of the total population, inferential statistics must be used to determine the degree of confidence when generalizing the findings from the particular survey respondents to the larger population.

> Tests of significance represent the probability of the measured association being due only to sampling error.... Levels of significance are derived from a logical model in which several samples are drawn from a given population. In the present case, we assume that there is no association between the variables in the population, and then ask what proportion of the samples drawn from that population would produce associations at least as great as those measured in the empirical data. Three levels of significance are frequently used in survey reports: .05, .01, and .001. These mean respectively, that the chances of obtaining the measured association as a result of sampling error are 5/100, 1/100, and 1/1000.[3]

Referring back to Table B.1, the recorded significance of Chi-square is less than .0001, thus, there is less than one chance in 10,000 that the observed association could have been purely a result of sampling error.[4] This finding means it can be stated with a fair degree of confidence that among Nova Scotian women who gave birth to their first child in 1978, unmarried mothers were less likely to have completed high school than married mothers.

Phi, Cramer's V and Chi-square are appropriate for variables that are divided into two or more distinct categories. Another slightly different measure of association called the Pearson Product-moment Correlation Coefficient (r) is used when the variables under consideration have many sequential rather than distinct categorical responses. Age is an example of such an interval-level variable, the respondent could be 14, 15, 16, 17 ... years of age.[5] This measure (r) not only reports the strength but also the direction of the association. Pearson's r can range from -1 to +1; -1 would mean there is a perfect negative correlation (the younger the respondent the higher her income) and +1 would mean there is a perfect positive correlation (the older the respondent the higher her income). Pearson's r can also range between these two extremes, with 0 meaning there is absolutely no association between the two variables being examined.

Two other measures that are used are the t-test and Mann-Whitney U test. Both tests report whether there is a statistically-significant difference between the scores of two groups. However, the t-test is applied when dealing with ratio- or interval-level data, while the Mann-Whitney U test is used for all ordinal-level data. For example, in the Employment chapter the average number of years spent in the labour force is compared for the married and unmarried mothers, five years, seven months and five years, to months, respectively. This discussion is followed by the results of a t-test ($t = 1.99$, $p =$ NS). What this shows is that there is not a statistically-significant difference between the number of months married and unmarried mothers spent working.[6]

Caution should be exercised in making comparisons between or across even similar measures of association. Both the strength and significance of the relationship are influenced by the number of cases under consideration.[7] The number of cases used for each analysis is followed by an "N =" or "n =" notation, which refers to the number of respondents being considered. In some instances the number of cases is low because certain sections of the questionnaire were not applicable to all individuals. For example, if a woman was not working it would be unnecessary to ask how satisfied she was with her job.

Bivariate analyses, as the name implies, are restricted to investigating the association between two variables. In many instances it is necessary to move beyond this level of analysis to examine the inter-relationships among three or more variables. The results of this project not only showed that unmarried mothers were less likely to have completed high school but also that the average age of the unmarried mothers was much lower than that of the married mothers. Consequently, the association between marital status and high school completion is questionable. Was it simply due to the fact that the unmarried mothers were younger and therefore unable to reach Grade 12 before their first child was born?

Contingency tables can be used as a way of understanding if the association between marital status and high school completion remains, or is erased, when one controls for the age of the respondent. Controlling for a third variable simply means that the original association, in this case between marital status and high school completion, is examined within each of the categories of another variable, in this case age.[8] Table B.4 illustrates the results of such a procedure.

TABLE B.4

High School Completion by Mother's Original Marital Status and Age

	19 YEARS AND UNDER		20 YEARS AND OVER	
	married	unmarried	married	unmarried
did not complete high school	76 %	89 %	30 %	66 %
completed high school	24	11	70	34
n =	(41)	(224)	(282)	(122)
	Phi = .14 Significance of Chi-square = NS		Phi = .34 Significance of Chi-square .0001	

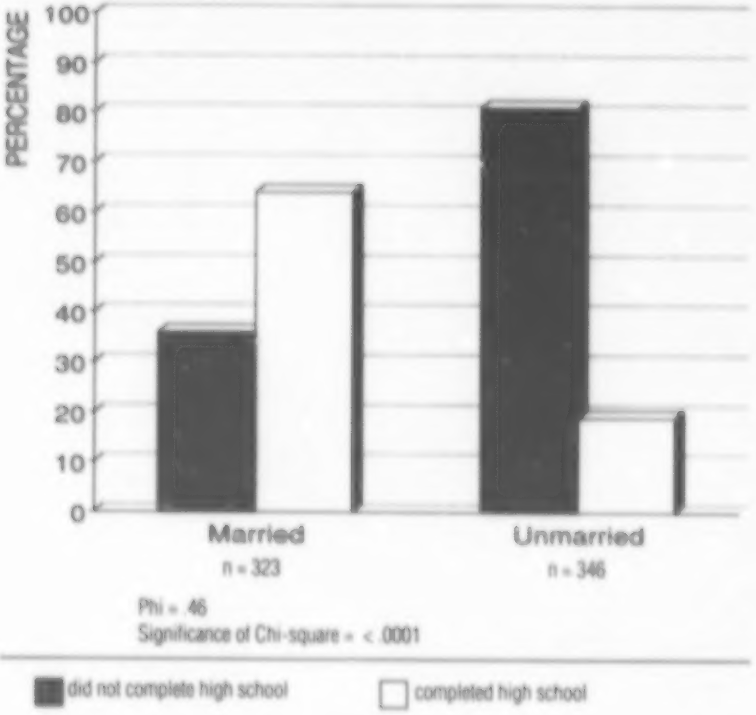
What this Table shows is that differences between high school completion among married and unmarried mothers persist even when age is taken into consideration. The married mothers in both the teenage and older-age categories were more likely to have completed high school before conceiving their first child. Among the respondents who had more than sufficient time to complete high school before their first child was born (i.e., were 20 years of age or older), the unmarried mothers were still much less likely than their married counterparts to have obtained a high school certificate.

To facilitate interpretation, the bivariate and contingency analyses for this report are usually presented in graphs rather than tables. Figures B.1 and B.2 illustrate exactly the same information as that provided in Tables B.1 and B.4, respectively.

The next level of analysis involves what are termed multivariate procedures. The primary objective of the analyses under discussion is to simultaneously examine the association between a number of independent variables such as age, marital status

FIGURE B.1

High School Completion by Mother's Original Marital Status



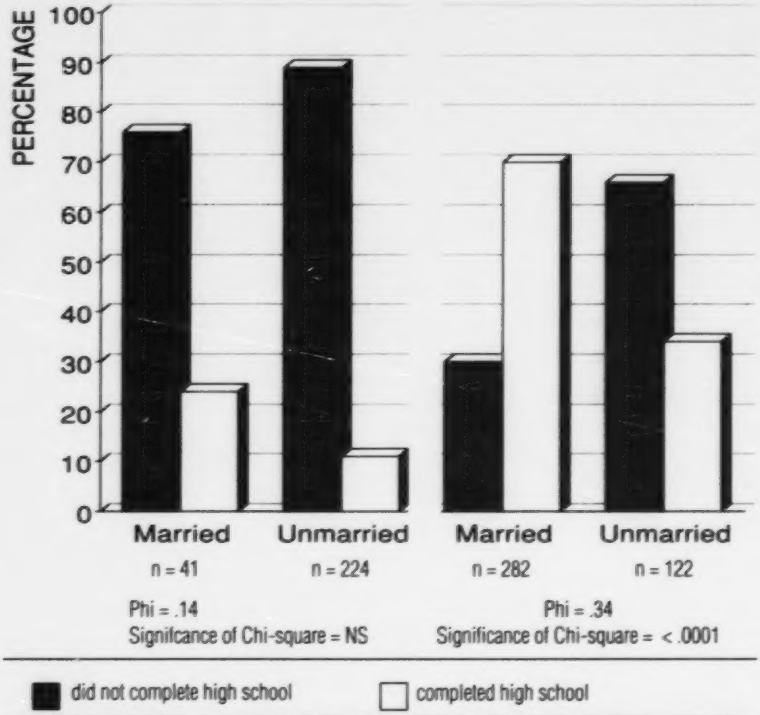
Phi = .46
Significance of Chi-square = < .0001

and parental support, and one dependent variable, such as whether the respondent returned to school after childbirth. The three multi-variate procedures used in this report are discriminant analysis, multiple regression and factor analysis. Discriminant analysis is appropriate when dealing with a dependent variable, such as returning to school, which has only two possible responses, while multiple regression is appropriate for continuous dependent variables, such as household income. Factor analysis, on the other hand, identifies constructs, or factors, that represent relationships between many inter-related variables.

Discriminant analysis has been used throughout this report to ascertain the relative strengths of numerous independent vari-

FIGURE B.2

High School Completion by Mother's Original Age and Marital Status



ables.[9] The logic behind this multi-variate procedure is the same as that discussed for contingency tables. Discriminant analysis takes the concept of control variables to a higher magnitude by permitting simultaneous control of more than one variable. All of the pertinent variables are entered into a discriminant equation to ascertain their contribution. The following example of discriminant analysis is drawn from the discussions of educational attainment (see Table B.5).

The standardized discriminant function coefficients are of great analytic importance in and of themselves. Each coefficient represents the relative contribution of its associated variable to the function.[10] The items listed in Table B.5 are a mixture of interval (e.g., age) and dichotomous (e.g., marital status) vari-

TABLE B.5

Discriminant Analysis for Participation in Education Programs After Childbirth for Mothers with Less than Grade 12

	Standardized Canonical Discriminant Function Coefficients
age	-.12
resided with parents	.11
welfare status of respondent's parents	-.15
original welfare status of respondent	-.01
planned pregnancy	.55
dropped out of school before becoming pregnant	.27
attitudes pertaining to maternal role	.22
marital status at the time of childbirth	.25
employment status	.11

Significance of Wilks' lambda <.001
n = 243

ables. In this instance, "planned pregnancy" exhibits the greatest contribution to participation in educational programs after childbirth for mothers with less than a Grade 12 education. "A test of the null hypothesis that in the populations from which the samples are drawn there is no difference between the group means can be based on Wilks' lambda."[11]

Multiple regression tables report three primary pieces of information: beta weights, multiple correlation and levels of significance.

> Each beta value represents the relative amount of contribution of that variable, after contributions of the other variables included in the regression equation are taken into account....Variables with beta coefficients which are very nearly zero have very little separate influence on the dependent variable, at least in the linear, additive way described by the multiple regression equation.[12]

The multiple correlation (R) is similar to the bivariate Pearson's Correlation Coefficient (r) except that it refers to the combined strength of a number of independent variables in predicting the dependent variable.[13] "The smaller the coefficient the poorer the correlation and the larger the coefficient the stronger the correlation."[14] Once again the level of significance for the betas and R refer to the probability that the observed associations could be purely a result of sampling error.

In contrast to these procedures, factor analysis is a statistical technique used to identify a relatively small number of constructs, or factors, that represent the relationships between many inter-related variables. The basic assumption of factor analysis is that observable correlations between many variables result from their sharing a commonality, or central concept.[15] For example, in Chapter 10 factor analysis was used to analyze a large number of questions asked of the mothers regarding the nature and quality of mother-child interactions. This analysis resulted in the identification of six factors useful in determining the commonalities between the many mother-child interactions.

Footnotes

1. Loether, H.J., and D.G. McTavish. *Descriptive Statistics for Sociologists: An Introduction*. Boston: Allyn and Bacon, Inc., 1974, p. 256.

2. Loether, H.J. and D.G. McTavish. 1974, p. 197.

3. Babbie, E.R. *Survey Researcb Methods*. Belmont, California: Wadsworth Publishing Company, Inc., 1973, p. 309.

4. All levels of significance are based on the assumption of random sampling techniques. Although the respondents for this project did not represent a simple random sample of the population, the total number of respondents is quite large suggesting that departures from random sampling procedures would not overly effect the significance levels of the statistical tests.

5. The Pearson Product-moment correlation coefficient will be referred to in the text of this report as "r". This measure is also accompanied by one of the following: NS, $p = .05$, $p = .01$, $p = .001$, or $p = .0001$. NS is the abbreviation for "no significant correlation". The "p" or probability value simply refers to the level of significance.

6. Similar to "r", the "p" or probability value accompanying the t value demonstrates the degree of significance of the means test.

7. Only 31 of the 41 original young married mothers were located and interviewed for the fourth data collection. Because of the small number of cases in this category, all age related correlation for phase four have been double checked by adding the new young married respondents to the analyses. Any discrepancies between these and reported finding are noted in the text.

   Analyses concentrating specifically on one or more of the first three data collections have been conducted using all of the original respondents.

Again, these findings have been double checked with only the 488 consistent respondents utilized for the analyses.

8. The measures of association and significance levels indicated when using control variables (e.g., marital status by education controlling for age) should be interpreted with caution. The reported Phi, Cramer's V and Chi-Square are susceptible to variations in the number of cases. Although percentage differences across groups may be equal to or greater than the original bivariate relationship (e.g., marital status by education), the level of significance will be artificially reduced when the number of cases is divided between the two age groups.

9. Prior to conducting the discriminant analysis, it is necessary to construct a correlation matrix of the independent variables to assure that no two variables are so highly correlated that this would distort the results.

10. Nie, N.H., et al. *Statistical Package for the Social Sciences, Second Edition.* New York: McGraw-Hill Book Company, 1975, p. 443.

11. Norusis, Marija J. *SPSS-X Advanced Statistics Guide, Second Edition.* Marketing Department, SPSS Inc, 444 North Michigan Avenue, Chicago, IL 60611, 1988, p. 90.

12. Loether, H.J. and D.G. McTavish, 1974, pp. 310-311.

13. The intercorrelations between all independent variables must be assessed before proceeding with the regression analyses.

14. Loether, H.J. and D.G. McTavish. 1974, p. 314.

15. Norusis, Marija J. 1988, pp. 125-127.

APPENDIX C

Diagnoses for Emergency Visits and Hospital Admissions Obtained from the Izaak Walton Killam Hospital Records

Diagnoses for Emergency Visits and Hospital Admissions Obtained from the Izaak Walton Killam Hospital Records

Code

D-I **accidental injury**

- cuts / lacerations / detached fingernail
- fractures / breaks
- bumps / bruises / abrasions / soft tissue injury / hematoma / contusion / testicular trauma
- bites / scratches / flea bites / dog bites / fly bite
- sprains / torn or pulled ligaments / subluxation of radius / pulled elbows / muscle strain or spasm / dislocation
- eye injury / foreign body in eye / scratched eye
- swallowed object
- poisoning
- infected cord / finger / foot / bellybutton
- smoke inhalation
- dental injury
- burn / scald
- leg injury
- foreign body in ear / foot / nose / hand / rectum
- sunburn
- ring stuck on finger
- concussion

D-II **childhood illnesses (includes flu, cold, etc., and infectious and parasitic diseases)**

- dehydration
- allergy / drug allergy / resp. allergy / allergic rhinitis

D-II **childhood illnesses (includes flu, cold, etc., and infectious and parasitic diseases)**

CONTINUED

respiratory (colds) / upper respiratory infection / coughs viral rhinitis / nasopharyngitis / croup

flu / diarrhea / chalasia (projectile vomiting)

littles area

scarlet fever

skin disorders / rash / eczema / dermatitis / urticaria / viral exanthem / bulbous impetigo / scabies

feeding problems / regurgitation

whooping cough / pertussis

measles / chicken pox / roseola / mumps / viral exanthema

sinusitis

mononucleosis

plantars wart / perineal wart

viral illness / viral infection / viral syndrome / viral ph

migraines

boil on arm

boil on knee

tuberculosis contact

alopecia (hair falling out, baldness)

ear & throat ailments: tonsillitis / tubes / pharyngitis / laryngitis / adenoid hypertrophy / viral laryngotracheitis / strep throat / lesion vocal cord / lymphadenitis / lymphadenopathy

eye & sight infections: dry eyes / strabismus / conjunctivitis / exotropia / acute blepharitis / (non injury) astigmatism

problems of mouth and teeth: boil on gum / abscessed teeth / mouth infection / herpetic gingivo-stomatitis /

D-II **childhood illnesses (includes flu, cold, etc., and infectious and parasitic diseases)**

CONTINUED

condyloma acuminatum / dental restoration / herpes / teething / thrush

oral candida

genitourinary disorders: UTI / cystitis / vaginitis / renal tubular acidosis / hydrocele / constipation / anal fissure / balanitis / xerotica obliterans / hemangioma of scrotum / inguinal lump / renal insufficiency / circumcision / vulvitis

arthritis / septic arthritis / rheumatoid arthritis / synovitis

cellulites

headlice

pinworm

food poisoning / salmonella

hernia / hernia repair / herniorrhaphy / hematoma / rt. hernia /

jaundice

blood disorders / anemia / iron deficiency / neutropenia

appendicitis

seizure / febrile seizure / febrile convulsion

failure to thrive

bone disorders - osteomyelitis / cranial synostosis / tumor mandibles

lump on breast

D-III **check, tests, remove stitches, remove cast, including post-op complications and/or adverse reactions**

suture removal / recheck sutures / reinsertion

tests only / recheck cast / recheck fracture / recheck laceration / recheck trauma / med only

post op T & A not drinking / post op T & A infection

D-III **check, tests, remove stitches, remove cast, including post-op complications and/or adverse reactions**

CONTINUED

ear tube removal / post tonsil bleeding / post-op edema

post-op fever

broken interdental wiring

scald recheck

reaction to immunization / medicine allergy reaction

D-IV **assault / abuse**

sexual assault

D-V **non-medical problem / unknown / emotional / behavioural problems**

no significant medical problem identified by doctor / healthy child / not sleeping / anxious mother

unknown / didn't stay to see doctor

no diagnosis appointment with doctor for admission

social problem (social admission) / inadequate housing / maternal incompetence

speech delay / language delay

behaviour problems / behaviour disorders / attention deficit disorders / family problems / developmental delay

night terrors

D-VI **congenital anomalies**

mental retardation / Down's syndrome / autism

congenital eye problems

birthmark

asymmetric crying face

wryneck

cleft lip

D-VI **congenital anomalies**

CONTINUED

congenital heart disease / heart murmur / tetralogy of Fallot

bilaterial prominent ears

aplasia testicle / impalpable testicle cryptorchidism / posterior ureteral valves

D-VII **lower respiratory**

respiratory: lower / bronchitis / asthma / pneumonia/ bronchiolitis / chronic airway obstruction pleurodynia / pleuritic chest pain / reactive airway disease coryza

D-VIII **symptoms and ill-defined conditions**

vomiting

nose bleeds / epistaxis

fever / pyrexia / P.U.O. / fever unknown origin

abdomenal pain / cramps

leg pain, NYD

headache

dysuria

APPENDIX D

Diagnoses for Hospital Admissions Obtained from the Nova Scotia Department of Health and Fitness

Diagnoses for Hospital Admissions Obtained from the Nova Scotia Department of Health and Fitness

Code	
D-I	**accidental injury**
	cuts / lacerations
	fractures / breaks
	bruises / soft tissue injury
	eye injury / scratched eye
	poisoning
	burn / scald
	leg injury
	concussion
	unspecified local infections of skin
	slipping / tripping / stumbling
D-II	**childhood illnesses (includes flu, cold, etc., and infectious and parasitic diseases)**
	dehydration
	allergy / drug allergy / resp. allergy / allergic rhinitis
	allergy / drug allergy / resp. allergy / allergic rhinitis
	respiratory (colds) / upper respiratory infection / coughs viral rhinitis / nasopharyngitis / croup
	flu / diarrhea / chalasia (projectile vomiting)
	littles area
	scarlet fever
	skin disorders / rash / eczema / dermatitis / urticaria / viral exanthem / bulbous impetigo / scabies
	feeding problems / regurgitation / scabies
	whooping cough / pertussis

D-II **childhood illnesses (includes flu, cold, etc., and infectious and parasitic diseases)**

CONTINUED

measles / chicken pox / roseola / mumps / viral exanthema
sinusitis

mononucleosis

plantars wart / perineal wart

viral illness / viral infection / viral syndrome / viral ph

migraines

boil on arm

boil on knee

tuberculosis contact

alopecia (hair falling out, baldness)

ear & throat ailments. tonsillitis / tubes / pharyngitis / laryngitis / adenoid hypertrophy / viral laryngotracheitis / strep throat / lesion vocal cord / lymphadenitis / lymphadenopathy

eye & sight infections: dry eyes / strabismus / conjunctivitis / exotropia / acute blepharitis / (non injury) astigmatism

problems of mouth and teeth: boil on gum / abscessed teeth / mouth infection / herpetic gingivo-stomatitis / condyloma acuminatum / dental restoration / herpes / teething / thrush

oral candida

genitourinary disorders: UTI / cystitis / vaginitis / renal tubular acidosis / hydrocele / constipation / anal fissure / balanitis / xerotica obliterans / hemangioma of scrotum / inguinal lump / renal insufficiency / circumcision / vulvitis

arthritis / septic arthritis / rheumatoid arthritis / synovitis

cellulites

headlice

D-II **childhood illnesses (includes flu, cold, etc., and infectious and parasitic diseases)**

CONTINUED

pinworm

food poisoning / salmonella

hernia / hernia repair / herniorrhaphy / hematoma / rt. hernia

jaundice

blood disorders / anemia / iron deficiency / neutropenia

appendicitis

seizure / febrile seizure / febrile convulsion

failure to thrive

bone disorders - osteomyelitis / cranial synostosis / tumor mandibles

lump on breast

D-III **check, tests, remove stitches, remove cast, including post-op complications and/or adverse reactions**

suture removal / recheck sutures / reinsertion

tests only / recheck cast / recheck fracture / recheck laceration / recheck trauma / med only

post op T & A not drinking / post op T & A infection

ear tube removal / post tonsil bleeding / post-op edema

post-op fever

broken interdental wiring

scald recheck

reaction to immunization / medicine allergy reaction

D-IV **assault / abuse**

sexual assault

D-V non-medical problem / unknown / emotional / behavioural problems

no significant medical problem identified by doctor / healthy child / not sleeping / anxious mother

unknown / didn't stay to see doctor

no diagnosis appointment with doctor for admission

social problem (social admission) / inadequate housing / maternal incompetence

speech delay / language delay

behaviour problems / behaviour disorders / attention deficit disorders / family problems / developmental delay

night terrors

D-VI congenital anomalies

mental retardation / Down's syndrome / autism

congenital eye problems

birthmark

asymmetric crying facies

wryneck

cleft lip

congenital heart disease / heart murmur / tetralogy of Fallot

bilaterial prominent ears

aplasia testicle / impalpable testicle cryptorchidism / posterior ureteral valves

D-VII lower respiratory

respiratory: lower / bronchitis / asthma / pneumonia/ bronchiolitis / chronic airway obstruction pleurodynia / pleuritic chest pain / reactive airway disease coryza

D-VIII symptoms and ill-defined conditions

vomiting

nose bleeds / epistaxis

D-VIII **symptoms and ill-defined conditions**

CONTINUED

fever / pyrexia / P.U.O. / fever unknown origin

abdomenal pain / cramps

leg pain, NYD

headache

dysuria

APPENDIX E

Medical Treatments for Emergency Visits and Hospital Admissions Obtained from the Izaak Walton Killam Hospital Records

Medical Treatments for Emergency Visits and Hospital Admissions Obtained from the Izaak Walton Killam Hospital Records

Code

T-A **mist tent / ice pack / wash / physio / photo**
- phototherapy
- mist tent / vaporizer / croupette / humidify
- sponge bath / ice pack / hot compresses
- physiotherapy
- reduction
- wash / cleansed / bandaged / soaked / aspiration / pressure applied

T-B **medication / vitamins**
- medication / ointment / aerosol mask
- vitamins
- rehydration

T-C **operation**
- operation ESWL treatment
- cauterization

T-D **tests / observe / no treatment**
- tests and xrays, blood, urine
- no treatment
- observation / recheck

T-E **stitches / cast**
- stitches, sutured / suture removal
- cast / cast repair / cast check / cast removal / splint / sling / brace / immobilize
- removal foreign body / brush out head lice

T-F **Advise / reassure**

advice / reassurance / diet instructions / head injury sheet / temp referral / social services consult

T-G **psychological**

psychological

psychological tests / behaviour IQ / speech tests / behaviour management teaching

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and

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